The Report Committee for Benjamin Daniel Ellinor
Certifies that this is the approved version of the following report:

The Costs of a Growing City:
A Case Study of Austin, Texas from 1982-2011

APPROVED BY
SUPERVISING COMMITTEE:

Supervisor:

Robert Wilson

Sherri Greenberg

The Costs of a Growing City:
A Case Study of Austin, Texas from 1982-2011

by

Benjamin Daniel Ellinor, B.A.

Report

Presented to the Faculty of the Graduate School of

The University of Texas at Austin

in Partial Fulfillment

of the Requirements

for the Degree of

Master of Public Affairs

The University of Texas at Austin

May 2013

Acknowledgements

I would like to acknowledge my supervisory committee, Dr. Robert Wilson and Sherri Greenberg, for their guidance and feedback during this process and for teaching the two courses I found most interesting and useful at the LBJ School. I would also like to acknowledge others that have supported me along the way: Dr. Michael Oden for help with my topic and for convincing me this report would be meaningful; Terrell Blodgett for inspiring a passion for local government and for your mentorship this past year; Dr. Sasha West for organizing the excellent writing workshops and for making me a better writer; Budget Office colleagues for making work enjoyable and for flexibility to finish this semester; my parents, Dan and Andrea for their love and support, the encouragement to go to graduate school, and for always pushing me to improve; John and Kelly for putting up with me and never letting me leave your home hungry; and family, friends, and fellow students for grounding me throughout graduate school. Finally, I want to thank my wife, Sarah, for taking this journey with me, for patience and sacrifice, for sharing my love of Austin, and for everything you do to make me the luckiest man alive.

Abstract

The Costs of a Growing City:
A Case Study of Austin, Texas from 1982-2011

Benjamin Daniel Ellinor, MPAff

The University of Texas at Austin, 2013

Supervisor: Robert Wilson

This report explores the effects of rapid growth in Austin, Texas, with an emphasis on local government budgets, service delivery, and citizen satisfaction. The relationship between urban growth and public finances has been studied extensively, but a comprehensive analysis of the relationship between growth and public finances, service delivery performance, and citizen satisfaction over time is lacking. A multi-decade analysis reveals a steady increase in the cost of local government services and levels of taxation, with corresponding high performance and citizen satisfaction over time. In light of these findings, recommendations to improve cost-effectiveness, service delivery, and citizen satisfaction include: regular audits of the City's performance measurement system to ensure the metrics tracked remain relevant to the challenges; better coordination of taxes and expenditures among local government entities to minimize the tax impact on residents; greater consideration of less costly alternative municipal service delivery systems; and concerted efforts to engage residents in the budget and service delivery decisions.

Table of Contents

List of Tables

List of Figures

Chapter 1: Introduction

The fundamental challenge for any government entity is how to maximize the quality of services to its citizens while minimizing the cost or tax impact of providing those services. The financial pressure facing governments is not a new phenomenon, though the 2007 financial crisis and ensuing recession has escalated public pressure on and criticism towards public sector spending in general, forcing policymakers to reassess the role of government in the 21st century.

Much of the national conversation on the role of government focuses on the U.S. federal government, simply because of its size and scope. A large percentage of federal spending finances necessary public goods that protect us from existential threats or financial vulnerability (national defense and social insurance for the elderly, poor, or disabled) or provides grant funding to state governments to encourage initiatives with national purpose (transportation infrastructure, education research, or large-scale environmental improvements). Moreover, these services are frequently implemented through complex intergovernmental finance and service delivery systems. Given the nature of these public goods, most people cannot easily trace the connection between their taxes and the programs they finance. Thus, it is not surprising that people report a higher perception of wasteful spending by the federal government than by state or local governments.[1]

In general, local governments finance goods that more directly affect people's daily lives (schools, parks, libraries, or police protection), which allows for a clearer perception of how tax dollars are spent in the community. Local governments can be adept at crafting policies to meet the needs of those that reside within a particular

[1] Jeffrey M. Jones, "Americans Say Federal Gov't Wastes Over Half of Every Dollar," September 19, 2011, http://www.gallup.com/poll/149543/americans-say-federal-gov-wastes-half-every-dollar.aspx.

jurisdiction, because the barriers to participatory democracy are lower and policymakers are more easily held accountable when they are required to live and work among their constituents. Likewise, the venue for drafting local policy is not in Washington, DC, or some potentially distant state capital, but rather the exact jurisdiction where policymakers reside. The existence of citizen commissions or advisory boards, neighborhood associations, and other civic-minded organizations allow for numerous opportunities for citizens to be involved in the political and financial direction of a local government.

Local governments are also unique relative to federal and state governments in that the jurisdictional boundaries expand as the population grows. The federal government and all fifty state governments have the responsibility to deliver services to a growing population, but unlike local governments, the physical boundaries of the United States have not changed drastically since the annexation of Alaska and Hawaii in 1959, and most state boundaries have remained the same for at least as long. In other words, the evolution of local government territorial development is still ongoing, and this presents an interesting topic for examination, particularly as it affects local government service delivery.

Given the reality that local governments are more visible and can deliver services directly to residents, any evaluation of public spending and service quality in a growing community will provide a meaningful tool to improve the collective decisions of local stakeholders, politicians, and city management. For this reason, this report will examine and evaluate data from a specific local government, the City of Austin, Texas. The city of Austin is a useful case study because it has undergone rapid growth and change over the past thirty years, and as a result the local government has adapted to respond to growing needs in the community. Austin residents have a long history of active civic participation and vested interest in preserving the high quality of life present in the city. Moreover,

rapidly growing cities present unique challenges that are worth examining, such as mitigating increased traffic, congestion, crime, pollution, and cost of living, while emphasizing environmental sustainability, socioeconomic diversity and inclusion. The City of Austin, in partnership with its residents and community stakeholders, will need to plan carefully to ensure Austin is a thriving community for future generations of residents, workers, and visitors.

The most pressing challenge for any growing city is finding a meaningful way to meet the growing demands of its residents with limited resources, and Austin is not unique in this respect. Although Austin has enjoyed a relatively prosperous property and sales tax base for many years to pay for increased service delivery, the ability to increase expenditures for a growing population will reach a limit when the costs imposed on residents becomes too high. To ensure limited financial resources are used to finance the most important community needs, local government officials typically make informed decisions on how to prioritize spending through an objective budget process. The primary method of budgeting for local governments is to assess the spending and revenue requirements to maintain existing services, then prioritize the ability to enhance or add to those services, and eventually find a way to cover new services with additional sources of revenue. To aid this process, the City of Austin and many other local governments use the method of performance-based budgeting to allocate resources to programs and services that can demonstrate quality and effectiveness. With performance-based budgeting, local government departments must justify any existing or additional spending requirements with a demonstrated goal for service delivery.

In many ways, the City of Austin is a model for accountability, effective budgeting, and high-quality service delivery.[2] To its credit, the City of Austin publishes the approved budget, Comprehensive Annual Financial Report (CAFR), department performance report, and citizen survey results online, and tracks all City department performances measures over several years in a publically available online database. Furthermore, the City of Austin started conducting citizen surveys in 1999 to gauge the level of community support for specific services and ultimately incorporate the findings into the existing performance-based budget process.[3]

One potential drawback of reporting information in annual documents and reports is the ability for policymakers and the public to easily comprehend the abundance of data available. Likewise, these financial documents and reports typically only provide data for the previous 3-5 years, a shortcoming only remedied by sifting through hundreds of pages of past documents and reports. For policymakers to make informed decisions in the future, it is crucial to look at past data from a longer time horizon (25-30 years), and to be presented with a concise analysis of revenue and expenditure patterns relative to performance indicators and citizen satisfaction with service delivery.

This report will present a comprehensive, multi-decade analysis of local government revenues, expenditures, and performance data for the City of Austin by compiling financial data for the previous 30 years (1982-2011) and comparing public expenditures to key performance indicators and citizen feedback. Also motivating this analysis are findings within the academic literature on the impact of population growth

---

[2] Patricia Fraga, "City Receives National Recognition for Financial Transparency," *City of Austin, Communications and Public Information Office*, July 31, 2012, http://austintexas.gov/news/city-receives-national-recognition-financial-transparency.

[3] To access historical performance measurement data and Citizen Survey documents, see https://www.ci.austin.tx.us/financeonline/finance/index.cfm

on the cost of local government services, and a desire to better incorporate growth issues into the public conversation on service delivery and public finances in Austin.

The rest of the report is organized as follows: Chapter 2 examines the existing academic literature on factors affecting cost of service provision in local government, theories of performance measurement and citizen outreach, and approaches to public sector cost-containment; Chapter 3 provides an overview of the salient issues related to rapid population growth in Austin, including demographic changes, the politics of growth management, annexation policy, transportation, and affordability; Chapter 4 presents a multi-decade analysis of local government revenues, expenditures, and performance data; Finally, Chapter 5 concludes with recommendations for incorporating this analysis into the current budget and policy decision process and considerations for future research.

Chapter 2: Literature Review

This chapter examines the existing academic literature on the motivating topics for this report: the effect of population growth on cost of service provision in local government, the rationale for performance measurement and citizen engagement in management decisions, and approaches to public sector cost-containment. An assessment of prior research on these specific issues is helpful to contextualize the methods used in this report and clarify areas where future research would be helpful for local government practitioners.

POPULATION GROWTH AND COST OF SERVICE PROVISION

Widespread academic interest in population growth and public sector service provision is useful given demonstrated concern among urban residents that population growth produces adverse effects such as higher taxes, lower quality public services, traffic congestion, or environmental degradation.[4] A significant portion of the literature on population growth examines how the built environment of cities (primarily high-density development versus low-density sprawl) affects the cost of service provision. Early proponents of channeling population growth into compact, high-density development argues that municipalities face diseconomies of scale for infrastructure spending and other services as the land area grows, which results in the eventual rise in cost of service-delivery.[5] On the other hand, critics of high-density development argued that these economies of scale would be overshadowed by costly negative externalities (poverty, crime, traffic, pollution), which would require greater municipal investments in

[4] Benjamin Chinitz, "Growth Management Good for the Town, Bad for the Nation?," *Journal of the American Planning Association* 56, no. 1 (1990): 3–8, doi:10.1080/01944369008975739.

[5] Real Estate Research Corporation, *The Costs of Sprawl: Environmental and Economic Costs of Alternative Residential Development Patterns at the Urban Fringe* (U.S. Environmental Protection Agency, 1974).

public safety, infrastructure, and environmental protection.[6] Over time, empirical analyses studying the relationship between density, land use, and local government spending have produced results consistent with both arguments.

One of the earliest studies of the fiscal effects of population growth came from Wheaton and Schussheim in 1955, whose findings provided evidence that higher-density development reduced public sector costs.[7] Another widely cited study was the 1977 *Cost of Sprawl* study by the Real Estate Research Corporation (RERC), which estimated that low-density development was potentially twice as expensive to support with public services as high-density development.[8] However, these early works were frequently criticized for using unrealistic land-use assumptions or failing to control for outside factors.

In response to these criticisms, subsequent studies used regression analysis to empirically examine the relationship between population density and per-capita public expenditures, while controlling for other determinants of public spending. These more sophisticated studies paint a more complicated picture of the relationship between population growth and per-capita cost of service.[9] For example, several studies find that population growth creates both economies and diseconomies of scale in service provision, where per-capita spending initially declines as density increases, but then increases sharply in the very densest municipalities.[10] Furthermore, the effect of

---

[6] Helen F. Ladd, "Population Growth, Density and the Costs of Providing Public Services," *Urban Studies* 29, no. 2 (April 1992): 273–295, doi:10.1080/00420989220080321.

[7] William L. C. Wheaton and Morton J. Schussheim, "The Cost of Municipal Services in Residential Areas" (U.S. Department of Commerce, 1955), http://hdl.handle.net/2027/uiug.30112000534377.

[8] Real Estate Research Corporation, *The Costs of Sprawl*.

[9] James E. Frank, *Costs of Alternative Development Patterns: A Review of the Literature* (Urban Land Institute, 1989); Robert W. Burchell, ed., *The Costs of Sprawl--Revisited*, Transit Cooperative Research Program (TCRP) Report 39 (Transportation Research Board, 1998).

[10] Helen F. Ladd, "Population Growth, Density and the Costs of Providing Public Services"; Helen F Ladd, "Fiscal Impacts of Local Population Growth: A Conceptual and Empirical Analysis," *Regional Science and*

increased density on both the cost of provision and total government expenditures is mixed. For instance, there is ample evidence from studies of cities in the United States and abroad that higher density development will, in general, lower the *cost* of service provision for local governments,[11] but little evidence that increased density lowers overall per capita government expenditures.[12]

With a lack of consensus on the effects of population growth on cost of service provision, more recent studies instead focus on identifying an optimal level of population density through land-development patterns or annexation to mitigate the negative effects of population growth found in previous studies.[13] Results from these studies provide an interesting framework for local government practitioners to consider when approaching growth-related issues, though unfortunately, the optimal results estimated in these models are difficult to achieve in practice, given the plethora of competing interests involved in annexation decisions and land-use development.

RATIONALE FOR PERFORMANCE-BASED DECISIONS AND CITIZEN ENGAGEMENT

Evidence of management approaches to improve business practices and devote resources to areas with the greatest impact on performance is well-documented in both

---

Urban Economics 24, no. 6 (December 1994): 661–686, doi:10.1016/0166-0462(94)90006-X; Helen F. Ladd and John Yinger, *America's Ailing Cities: Fiscal Health and the Design Ofurban Policy* (Baltimore: Johns Hopkins University Press, 1989).

[11] Mary M. Edwards and Yu Xiao, "Annexation, Local Government Spending, and the Complicating Role of Density," *Urban Affairs Review* 45, no. 2 (November 2009): 147–165, doi:10.1177/1078087409341036; Miriam Hortas-Rico and Albert Solé-Ollé, "Does Urban Sprawl Increase the Costs of Providing Local Public Services? Evidence from Spanish Municipalities," *Urban Studies* 47, no. 7 (June 1, 2010): 1513–1540, doi:10.1177/0042098009353620.

[12] Randall G. Holcombe and DeEdgra W. Williams, "The Impact of Population Density on Municipal Government Expenditures," *Public Finance Review* 36, no. 3 (May 2008): 359–373, doi:10.1177/1091142107308302.

[13] Gaines H. Liner and Rob Roy McGregor, "Optimal Annexation," *Applied Economics* 34, no. 12 (August 2002): 1477–1485; Mary M. Edwards and Yu Xiao, "Annexation, Local Government Spending, and the Complicating Role of Density."

the private and public sectors.[14] Among the plethora of performance improvement systems developed (e.g. Total Quality Management, Six Sigma, Balanced Scorecard, etc.), the underlying motivation is the same: to establish a disciplined approach to identify, control, and manage processes.[15] Although performance-based management has been traced back centuries, a renewed emphasis in the 1990s on reinventing government and public management provided a natural avenue for addressing performance measurement.[16]

Local government organizations such as the International City Managers Association (ICMA) and the Governmental Accounting Standards Board (GASB) promote performance measurement as an important tool for moving toward a more results-oriented accountability system, supported by research on its effectiveness.[17] Critics of performance measurement systems argue that most organizations lack sophisticated measures or narrowly focus limited resources to improve productivity at the expense of other valuable goals.[18] The City of Austin implemented a performance measurement system in 1999 called Managing for Results, and the results have been generally positive.[19]

---

[14] Suwit Srimai, Jack Radford, and Chris Wright, "Evolutionary Paths of Performance Measurement: An Overview of Its Recent Development," *International Journal of Productivity and Performance Management* 60, no. 7 (2011): 662–687, doi:10.1108/17410401111167771.

[15] Daniel B. Edds, "Performance management as a sustainable enterprise: the Washington State Transportation Improvement Board's example," *Government Finance Review*, December 2011.

[16] Daniel Bromberg, "Performance Measurement: A System with a Purpose or a Purposeless System?," *Public Performance & Management Review* 33, no. 2 (December 2009): 214–221.

[17] Robert D. Behn, *Rethinking Democratic Accountability* (Brookings Institution Press, 2001); David Osborne, *Reinventing Government: How the Entrepreneurial Spirit Is Transforming the Public Sector* (New York, N.Y., U.S.A: Plume, 1993).

[18] Daniel Bromberg, "Performance Measurement"; Jie Gao, "Governing by Goals and Numbers: A Case Study in the Use of Performance Measurement to Build State Capacity in China," *Public Administration and Development* 29, no. 1 (2009): 21–31, doi:10.1002/pad.514.

[19] Mike Erwin, "Managing for Results Austin Texas" (ICMA Best Practices 2004, April 2004), http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0CDEQFjAA&url=http%3A%2F%2Ficma.org%2FDocuments%2FDocument%2FDocument%2F7201&ei=pbV6UeT7KOmQ2gWV2oC4Ag&usg=AFQjCNHOektnHgdv-jlrAT8Ew8Q2T5bwLA&bvm=bv.45645796,d.b2I&cad=rja.

Other research focuses on the role of citizen engagement in the public decision-making process. Early considerations of citizen input as a tool for performance measurement focused primarily on the shortcomings of such an approach, such as measurement issues and the validity of citizen responses in surveys.[20] Recent literature places a greater emphasis on the connection between the level of public engagement and how local governments deliver services. Evidence from U.S. cities shows that city managers foster greater community support for local government service delivery by engaging public, private, and citizen groups in decision-making.[21] Evidence from numerous citizen surveys consistently demonstrates that individuals are willing to put community interests above personal interests as long as they believe others in the community are willing to do the same.[22] More specifically, individuals who perceive a community-wide commitment to shared sacrifice tend to have more positive views of government, are more satisfied with local government service delivery, and are more willing to support higher government expenditures and taxation.[23] Furthermore, citizen attitudes about local government services generally determine the willingness to pay for them, and those attitudes are typically shaped by direct experience or media exposure.

---

[20] Shirley S. Angrist, "Subjective Social Indicators for Urban Areas: How Useful for Policy?," *Sociological Focus* 9, no. 3 (August 1976): 217–230, doi:10.2307/20831001; Brian Stipak, "Citizen Satisfaction with Urban Services: Potential Misuse as a Performance Indicator," *Public Administration Review* 39, no. 1 (January 1979): 46–52, doi:10.2307/3110378.

[21] Mildred E. Warner, "Privatization and urban governance: The continuing challenges of efficiency, voice and integration," *Cities* 29 (December 2012): S38–S43, doi:10.1016/j.cities.2012.06.007.

[22] Margaret J. Wheatly and Myron Kellner-Rogers, "The Paradox and Promise of Community," in *The Community of the Future*, ed. Frances Hesselbein et al. (Jossey-Bass, 2000), 45–54; Mark A. Glaser, Lee E. Parker, and Stephanie Payton, "The Paradox Between Community and Self-Interest: Local Government, Neighborhoods, and Media," *Journal of Urban Affairs* 23, no. 1 (2001): 87–102, doi:10.1111/0735-2166.00077.

[23] Mark A. Glaser, Maria P. Aristigueta, and Stephanie Payton, "Harnessing the Resources of Community: The Ultimate Performance Agenda," *Public Productivity & Management Review* 23, no. 4 (2000): 428–448, doi:10.2307/3380562; Bill Simonsen and Mark D. Robbins, "Reasonableness, Satisfaction, and Willingness to Pay Property Taxes," *Urban Affairs Review* 38, no. 6 (July 1, 2003): 831–854, doi:10.1177/1078087403038006004.

Research on this relationship indicates that citizen attitudes are decent predictors of the willingness to pay for local government services in general as well as specific local services such as public safety.[24]

Also influencing individuals' decisions to support or resist higher expenditures and taxation is the perception of local government actions. Central to the relationship between citizens and local government is an understanding that programs and services financed with taxpayer dollars should enhance community well-being over private interests. Thus, when local governments demonstrate a commitment to community well-being and transparency, citizens' attitudes towards government and its services improve along with the willingness to support higher levels of public expenditures and taxation. On the other hand, when local governments pursue policies that are perceived to enhance private interests or do not effectively link public expenditures to community well-being, support for government expenditures and taxation weakens along with the vital commitment to shared sacrifice.[25] These findings suggest the possibility that local governments capable of demonstrating efficiency and quality in service provision do not necessarily have lower levels of public expenditures or taxation.

APPROACHES TO PUBLIC SECTOR COST-CONTAINMENT

Local governments are often faced with challenges to provide a growing number of services with fewer administrative and financial resources. Over the years, the pressure to delivery services more efficiently has led to innovations in local governmental organization such as city-county consolidation, privatization, and public-private

[24] Amy K. Donahue and Joanne M. Miller, "Citizen Preferences and Paying for Police," *Journal of Urban Affairs* 27, no. 4 (2005): 419–435, doi:10.1111/j.0735-2166.2005.00244.x.
[25] Simonsen and Robbins, "Reasonableness, Satisfaction, and Willingness to Pay Property Taxes."

partnerships. Incidentally, a growing body of literature examines the effectiveness of these new approaches relative to traditional service delivery arrangements.

One approach to cost-containment and greater efficiency in service delivery is the consolidation of the city and county jurisdictions, which results in a unified governmental entity that assumes the roles and responsibilities of both jurisdictions.[26] Proponents of consolidation suggest that merging governmental structures will lower the initial fixed cost for public service provision and allow for economies of scale to reduce overall governmental spending.[27] Furthermore, eliminating redundant provision of public goods should reduce the amount of government employees or elected officials.[28]

On the other hand, several theoretical models attempt to explain why consolidation may not result in efficiency savings. Economist Charles Tiebout's seminal work on public-choice theory argued that a decentralized system of government would lead to an efficient allocation of resources by allowing for greater choice among residents with different preferences for public spending.[29] For example, with the existence of multiple jurisdictions in a particular community, older residents without school-age children might choose to live in an area without a public school to avoid paying the necessary taxes to support that entity. Extending Tiebout's argument further, Geoffrey Brennan and James Buchannan's influential "Leviathan hypothesis" proposed that governmental consolidation would reduce the pressure among different jurisdictions to

---

[26] Consolidation has occurred in the major jurisdictions of: Miami-Dade County, Florida; Nashville-Davidson County, Tennessee; Indianapolis-Marion County, Indiana; Wyandotte County-Kansas City, Kansas; and Louisville-Jefferson County, Kentucky.

[27] George A. Boyne, "Local Government Structure and Performance: Lessons from America?," *Public Administration* 70, no. 3 (1992): 333–357.

[28] Beverly S. Bunch and Robert P. Strauss, "Municipal Consolidation An Analysis of the Financial Benefits for Fiscally Distressed Small Municipalities," *Urban Affairs Review* 27, no. 4 (June 1992): 615–629, doi:10.1177/004208169202700407.

[29] Charles M. Tiebout, "A Pure Theory of Local Expenditures," *Journal of Political Economy* 64, no. 5 (1956): 416–424, doi:10.2307/1826343.

compete for residents and businesses based on lower taxes or regulation. This effect is similar to a monopoly in the private sector, where a company or organization in a particular market no longer faces the pressure to compete for customers based on lower costs or higher quality.[30]

Beyond the theoretical arguments for or against government consolidation, numerous studies have attempted to answer the question definitively by looking at the evidence of actual consolidations relative to fragmented systems. For example, Dagney Faulk and Georg Grassmueck tested data from 62 communities that voted on city-county consolidation referenda between 1970 and 2002, and found that per capita expenditures in consolidated communities were not statistically different from those that considered and rejected consolidation.[31] Richard Feiock concluded from extensive review of the literature that government consolidation, in most cases, resulted in higher taxes and expenditures, primarily as a consequence of higher personnel costs mandated by special interests through the consolidated government charter.[32] Finally, Lawrence Martin and Jeannie Schiff present the findings of fifty peer-reviewed studies and conclude that there is little evidence to support the efficiency argument for either city-county consolidation or reducing local government fragmentation in general.[33]

---

[30] Geoffrey Brennan and James M. Buchanan, "Towards a Tax Constitution for Leviathan," *Journal of Public Economics* 8, no. 3 (December 1977): 255–273, doi:10.1016/0047-2727(77)90001-9.

[31] Dagney Faulk and Georg Grassmueck, "City-county Consolidation and Local Government Expenditures," *State and Local Government Review* 44, no. 3 (December 1, 2012): 196–205, doi:10.1177/0160323X12447955.

[32] Richard C. Feiock, "Do Consolidation Entrepreneurs Make a Deal with the Devil?," in *City-county Consolidation and Its Alternatives: Reshaping the Local Government Landscape*, ed. Jered B. Carr and Richard C. Feiock, Reshaping the Local Government Landscape (Armonk, N.Y: M.E. Sharpe, 2004), 39–52.

[33] Lawrence L. Martin and Jeannie Hock Schiff, "City–County Consolidations Promise Versus Performance," *State and Local Government Review* 43, no. 2 (August 1, 2011): 167–177, doi:10.1177/0160323X11403938.

Another widely-used approach to cost-containment across all levels of government is privatization, generally equated with the contracting and management of public functions to private firms. Early proponents of increased privatization of government functions argued that introducing market incentives and competition would result in higher quality service delivery at lower costs.[34] Other government practitioners broadened the scope of privatization reforms to combine private contracting with more consumer choice and neighborhood engagement in urban decision making.[35] The privatization movement escalated in the 1980s with the resurgence of the conservative movement in the United States and Great Britain, and the topic has since facilitated ideological debates on the role of government between conservatives and liberals.

The debate on the role of government is usually more ideological at the federal or state level, not surprisingly because service delivery at those higher levels is not conducive to citizen scrutiny or accountability.[36] In contrast, service delivery is most visible at the local level, and local officials pursuing service delivery reforms are easily pressured to reverse course if the quality of those results do meet with public approval. Extensive research on the behavior of local government officials supports this theory and demonstrates that the use of privatization for urban service delivery transcends political affiliation and managerial capacity.[37] In fact, the pressures to privatize are greater at the local level when federal and state assistance for large infrastructure projects decreases

---

[34] Emanuel S. Savas, *Privatization: The Key to Better Government*, Chatham House Series on Change in American Politics (Chatham, N.J: Chatham House Publishers, 1987).

[35] David Osborne, *Reinventing Government*.

[36] Mildred E. Warner, "Privatization and urban governance."

[37] Amir Hefetz and Mildred Warner, "Privatization and Its Reverse: Explaining the Dynamics of the Government Contracting Process," *Journal of Public Administration Research and Theory* 14, no. 2 (April 2004): 171–190, doi:10.1093/jopart/muh012; Germà Bel and Xavier Fageda, "Why Do Local Governments Privatise Public Services? A Survey of Empirical Studies," *Local Government Studies* 33, no. 4 (2007): 517–534, doi:10.1080/03003930701417528.

and city managers must experiment with new reforms for financing and delivering services.[38]

The decades-long experiment with privatization has shown some promising results, such as increased adoption of technological innovation, but the overall consensus among scholars is that privatization alone is insufficient to reduce costs or improve quality.[39] Lower costs are most likely to be found in competitive markets where some innovation in service delivery has led to improved process efficiency. Unfortunately, the competition needed to produce the desired results is rarely present in local government service markets, with an average of less than two providers available in urban markets for most services.[40] Furthermore, once the bidding competition for government contracts ends, the execution of that service is no longer subject to competition from outside firms, and local governments face increased costs for contract oversight and monitoring.[41] Without the ability to create a robust market for service providers, local governments are effectively substituting a public monopoly for a private one and are unlikely to see better results for cost and quality. Finally, some scholars bring attention to the differences in motivation between private firms and local governments, and warn that the profit motive is not necessarily compatible with public sector goals of equitable access and citizen engagement.[42]

---

[38] Mildred E. Warner, "Privatization and urban governance."

[39] Germà Bel, Xavier Fageda, and Mildred E. Warner, "Is Private Production of Public Services Cheaper Than Public Production? A Meta-regression Analysis of Solid Waste and Water Services," *Journal of Policy Analysis and Management* 29, no. 3 (2010): 553–577, doi:10.1002/pam.20509; George A. Boyne, *Public Choice Theory and Local Government: a Comparativeanalysis of the UK and the USA* (Houndmills, Basingstoke, Hampshire : New York: Macmillan Press ; St. Martin's Press, 1998).

[40] Amir Hefetz and Mildred Warner, "Privatization and Its Reverse."

[41] Mildred E. Warner, "The Future of Local Government: Twenty-First-Century Challenges," *Public Administration Review* 70 (2010): s145–s147, doi:10.1111/j.1540-6210.2010.02257.x.

[42] Richard C. Box, "Running Government Like a Business Implications for Public Administration Theory and Practice," *The American Review of Public Administration* 29, no. 1 (March 1999): 19–43, doi:10.1177/02750749922064256; M Ramesh, Eduardo Araral, and Wu Xun, *Reasserting the public in*

In response to the shortcomings of privatization, local governments are experimenting with other innovative approaches to service delivery and cost-containment. One such innovation is the formation of public-private partnerships (P3s) to entice private capital to finance large capital expenditures, usually infrastructure projects. These partnerships can take many forms, but the most common bundles finance, construction, and operation of a self-contained project in a single long-term service contract with a private firm. The public sector can either finance the project directly or incentivize the private firm to provide upfront investment with the promise of receiving user fees or governmental transfers for the duration of the contract.[43] Similar to the literature on privatization, evaluations of the effectiveness of P3s are mixed, and the limitations of P3 are similar to those of privatization in general. Proponents point to the ability of P3s to accelerate construction and provide cost savings to local governments[44] as well as to attract upfront capital for much-needed infrastructure projects.[45] Critics point to the high transaction costs for local governments to manage these complex relationships and the potential undermining of public values by profit-seeking firms.[46] With no silver bullet for providing effective service delivery and cost-containment, much of the current research is focused on best practices for successful P3s in local government.[47]

---

public services new public management reforms (London; New York: Routledge, 2010), http://search.ebscohost.com/login.aspx?direct=true&scope=site&db=nlebk&db=nlabk&AN=311536.

[43] Efraim Sadka, "Public-Private Partnerships—A Public Economics Perspective," *CESifo Economic Studies* 53, no. 3 (September 2007): 466–490, doi:10.1093/cesifo/ifm013.

[44] Timothy J. Murphy, "The Case for Public-private Partnerships in Infrastructure," *Canadian Public Administration* 51, no. 1 (2008): 99–126, doi:10.1111/j.1754-7121.2008.00006.x.

[45] Richard R. Geddes, *The Road to Renewal: Private Investment in the U.S. Transportation Infrastructure* (AEI Press, 2011).

[46] Graeme A Hodge, "The Risky Business of Public–private Partnerships," *Australian Journal of Public Administration* 63, no. 4 (2004): 37–49, doi:10.1111/j.1467-8500.2004.00400.x.

[47] Aidan R. Vining and Anthony E. Boardman, "Public—Private Partnerships Eight Rules for Governments," *Public Works Management & Policy* 13, no. 2 (October 2008): 149–161, doi:10.1177/1087724X08323843.

Despite the robust literature on population growth, local government cost of service provision, performance measurement, citizen behavior, and approaches to cost-containment, research on how each of these concepts interact dynamically is lacking. Given the complexity of local government management, an integrative evaluation of financial data, performance measures, and citizen feedback would be invaluable.

Unfortunately, undertaking an empirical analysis of these disparate data sources to establish causal relationships would likely not stand up to scrutiny, given the abundance of extraneous political factors affecting local government management. However, a qualitative approach to integrating financial data, performance measures, and citizen feedback would be a helpful starting point to direct future empirical studies of the fiscal effects of population growth. Applying this approach to Austin begins with an examination of the important policy issues related to rapid growth, followed by a descriptive analysis of the trends in financial data, performance measures, and citizen feedback.

Chapter 3: Growth Issues in Austin, TX

Austin is one of the fastest growing cities in the United States, a trend that is likely to continue given the strong economic outlook, high quality of life, and cost of living relative to other cities of comparable size. In many ways, consistent growth in population and jobs has been a boon for certain sectors of the Austin economy (real estate, construction, and service industries), and tax base, though there have been negative impacts as well. This chapter will focus on the salient issues related to growth in Austin from the 1980s through 2011, including demographic changes, the politics of growth management, annexation policy, transportation, and affordability in order to contextualize the challenges facing service delivery by the City of Austin in the future.

DEMOGRAPHICS

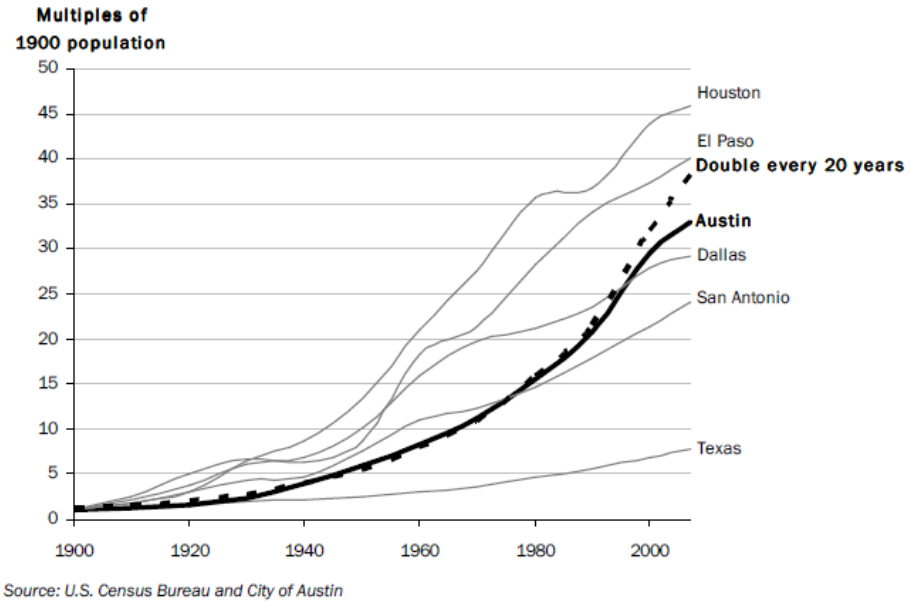
Demographic changes are arguably the most important driver of change in the physical landscape of the city and in the policy challenges that will be addressed throughout this chapter. Not only are demographic trends an important component of how a city allocates services in general, but more importantly, demographic trends influence how a city plans for changes in the future. This section will specifically address trends in population growth, density, regional dispersion, and socioeconomic disparity as they relate to the demographic evolution in Austin from 1982 to 2011.

Austin has a long history of rapid population growth, averaging a doubling of its population every twenty years since 1900.[48] To illustrate this trend, Figure 3.1 shows a comparison of population growth rates among Texas cities from 1900 to 2011, and for the first 90 years of this time period, Austin's population growth rate kept pace with the

[48] City of Austin, Planning and Development Review Department, "City of Austin Population History: 1840-2013," accessed February 13, 2013, http://www.austintexas.gov/sites/default/files/files/Planning/Demographics/population_history_pub.pdf.

twenty year doubling rate. Not surprisingly, between 1982 and 2011 (the time period that is the focus of this report) the population increased by 123 percent (367,550 to 820,611).[49] Based on estimates from the city demographer, Austin is expected to add another 470,000 people by 2045 through a combination of in-migration and internal population growth.[50]

Figure 3.1: Multiples of 1900 population for Austin, Texas, and other large Texas cities[51]



Source: U.S. Census Bureau and City of Austin

The amount of land within the city's jurisdiction has kept pace (increasing by 128 percent from 1982-2011), though not necessarily in tandem with population growth. Figure 3.2 shows a comparison of population growth and density over this period,

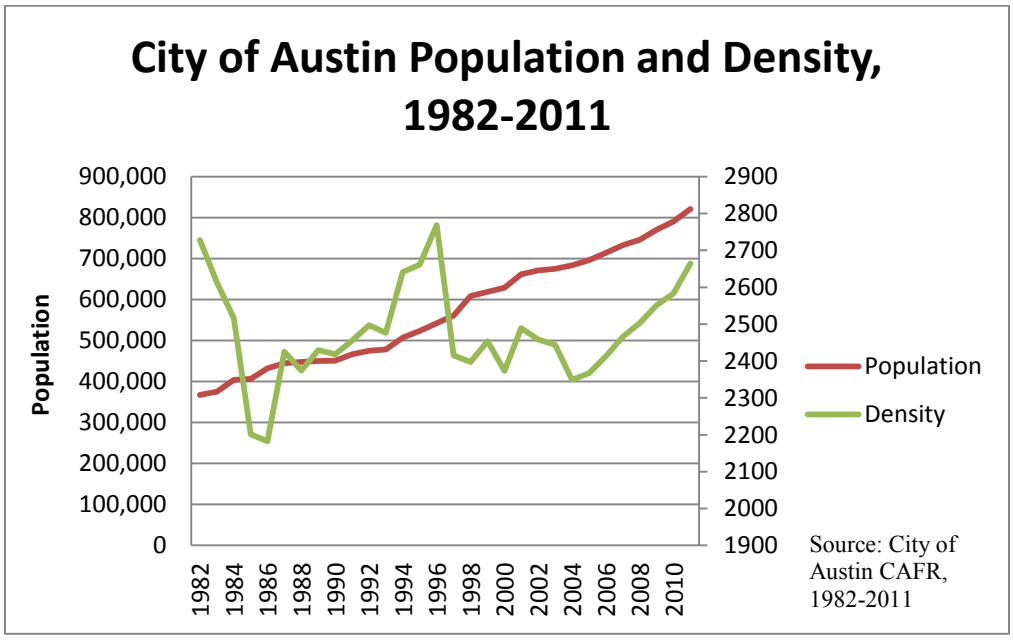
[49] Ryan Robinson, "Austin Area Population Histories and Forecasts" (City of Austin, Planning and Development Review Department, January 2013), http://www.austintexas.gov/sites/default/files/files/Planning/Demographics/austin_forecast_2013_annual_pub.pdf.

[50] Ibid.

[51] City of Austin, Planning and Development Review Department, "Community Inventory: Demographic and Household Trends," December 2009, 1, ftp://ftp.ci.austin.tx.us/GIS-Data/planning/compplan/community_inventory_Demographcs_v1.pdf.

highlighting the uneven growth in population and the land area of the city. For In particular, from 2000 to 2010, there was a 25 percent increase in population (including a third of that increase from annexation of existing areas), but only a 15 percent increase in the size of the city's jurisdiction. The trend towards greater density over the past decade is attributable to existing restrictions on development in environmentally-sensitive areas and an emphasis by the City of Austin towards infill development, policies discussed later in this chapter. Nonetheless, Austin is still relatively sparsely populated compared to other cities in Texas and around the country.[52]

Figure 3.2: City of Austin Population and Density, 1982-2011[53]



[52] Density for Austin in 2010 was 2,653 people per square mile. Density for comparable cities: Seattle, WA (7,254); Minneapolis, MN (7,084); Portland, OR (4,376); Dallas, TX (3,517); Houston, TX (3,501); Raleigh, NC (2,826).

[53] Data are taken from population estimates in the Appendices of various City of Austin Comprehensive Annual Financial Reports. Estimates are made by the City Demographer based on full purpose area as of September 30.

Furthermore, while population growth has been dramatic for Austin, the share of the population living within the city limits has declined relative to the rest of the region, indicating a trend towards greater urbanization of suburban and exurban areas.[54] The recently approved Imagine Austin Comprehensive Plan recognizes the growing importance of other cities within the region and appropriately calls for a regional approach to future development and service delivery.[55] Past examples of interjurisdictional planning and service delivery include the agreement between the City of Austin and Travis County for Emergency Medical Services (EMS), the extension of public transit access by Capital Metro to areas within neighboring counties, and the crafting of a unified regional vision for future population growth, land use, and transportation through the Envision Central Texas Plan.[56]

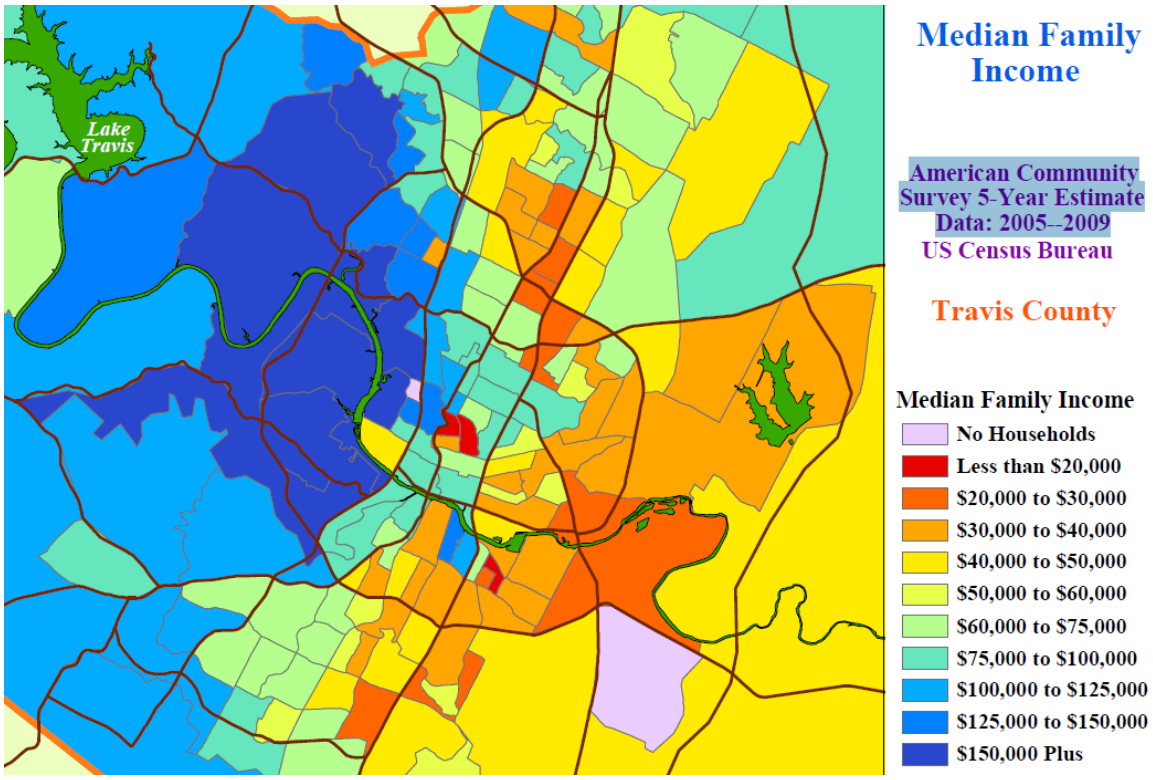
Another important demographic trend in Austin includes the rise in median family income ($63,672 in 2011), which is now higher than the U.S. average and all other major Texas cities.[57] However, the relative prosperity of Austin residents is distributed unequally across all areas of the city, resulting in a large disparity in real estate values, crime statistics, and educational attainment.[58] Figure 3.3 illustrates the disparity in income between the western and eastern portions of the city, a legacy that endures from the 1928 land use plan that created de facto segregation and economic isolation of minority households in east Austin.[59] Austin also has a persistently high poverty rate in

---

[54] City of Austin, "Imagine Austin Comprehensive Plan," June 2012, 22, http://www.austintexas.gov/imagineaustin.
[55] Ibid., 73–77.
[56] Envision Central Texas, "A Vision for Central Texas," May 2004, http://envisioncentraltexas.org/resources/ECT_visiondoc.pdf.
[57] U. S. Census Bureau, "1-Year Estimates, Selected Economic Characteristics," accessed February 13, 2013, http://factfinder2.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t.
[58] City of Austin, "Imagine Austin Comprehensive Plan," 213.
[59] Katherine Gregor, "Austin Comp Planning: A Brief History," *The Austin Chronicle*, February 5, 2010, http://www.austinchronicle.com/news/2010-02-05/953471/.

the aftermath of the recent recession (20% in 2011), particularly among children under 5 years old (31%).[60] Particularly alarming is that 83 percent of Austin children living below the poverty line are Hispanic, the highest of any racial or ethnic group, and the fastest-growing demographic over the past decade.[61]

Figure 3.3: Median Family Income, Travis County[62]



POLITICS: DEVELOPMENT WARS AND SMART GROWTH

The City of Austin has been at the forefront of the debate over growth management, often balancing the need for economic growth with preserving the sense of place that gives Austin a high quality of life. This section will highlight the two most

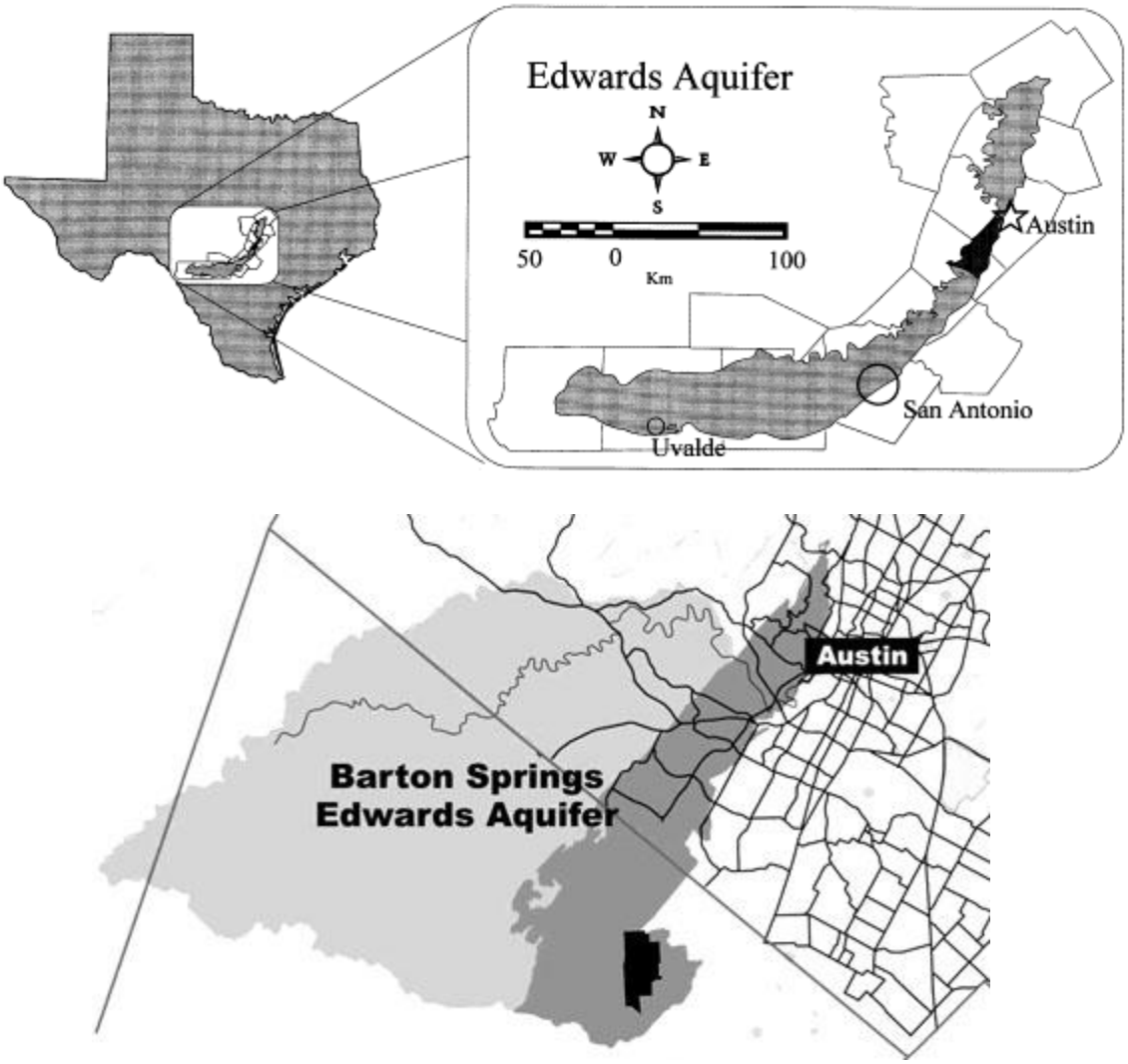
[60] U. S. Census Bureau, "1-Year Estimates, Selected Economic Characteristics."
[61] City of Austin, "Imagine Austin Comprehensive Plan," 24.
[62] City of Austin, Planning and Development Review Department, "Demographic Maps," accessed February 26, 2013, http://www.austintexas.gov/page/demographic-maps.

influential aspects of Austin's growth management policy since the 1980s: the Save Our Springs (S.O.S.) Ordinance to protect environmentally-sensitive land over the Edwards Aquifer and the Smart Growth strategy pursued in the late 1990s as a compromise between environmentalists and developers.

The environmental movement in Austin has a long history tracing back to its founding years, but in recent years, local environmentalists have been mobilized by concerns that rapid urbanization and sprawl in Austin would destroy the environmentally-sensitive areas along the Edwards Aquifer (see Figure 3.4), contaminate the city's water supply, and spoil one of the city's most admired natural swimming pools, Barton Springs. A significant effect of rapid population growth and commercial development in Austin since 1982 has been a tumultuous political dynamic involving grassroots groups wanting to protect and preserve sensitive (though highly desirable) environmental areas and pro-business groups wanting unrestricted development. The conflict between these factions reached an apex in the 1990s—commonly referred to as the "growth wars" by longtime residents—and the results since that time have been mixed for both groups.[63]

[63] For the definitive academic work on the history and consequences of the environmental movement in Austin, see William Scott Swearingen, *Environmental City: People, Place, Politics, and the Meaning of Modern Austin* (University of Texas Press, 2010).

Figure 3.4: Edwards Aquifer (top)[64] and Barton Creek Segment (bottom)[65]



[64] Michael E Barrett and Randall J Charbeneau, "A Parsimonious Model for Simulating Flow in a Karst Aquifer," *Journal of Hydrology* 196, no. 1–4 (September 1, 1997): 47–65, doi:10.1016/S0022-1694(96)03339-2.

[65] Jacob Cottingham, "Austin May Join Effort to Buy Aquifer Property," August 1, 2008, http://www.austinchronicle.com/news/2008-08-01/654033/.

The "growth wars" of the 1990s unofficially began on June 7, 1990 following an all-night City Council meeting that turned out over 800 residents to speak against FM Properties (now Stratus Properties) and the proposed 4,000-acre Barton Creek Planned Unit Development (PUD).[66] After the eventual unanimous decision by City Council to reject the development, City staff moved to update the 1986 Comprehensive Watersheds Ordinance (CWO) on an interim basis to include stricter limits on impervious cover and pollution in the Barton Creek Watershed.[67] However, the victory for water quality activists was short-lived, because within a year, representatives for local developers convinced City Council to rework the interim ordinance in their favor, and the Texas Legislature passed legislation exempting developers from any regulatory changes passed after the first permit was filed for a project.[68]

Fearing further backlash from developers and the Texas Legislature, an amalgam of environmental groups and activists formed the Save Our Springs Coalition in 1991. The group drafted an ordinance (known as the S.O.S Ordinance) to protect water quality and endangered species by restricting development over the Barton Springs segment of the Edwards Aquifer (see Figure 3.4). By presenting the City of Austin with a petition of over 30,000 signatures, the S.O.S Ordinance was put on the August 1992 special election ballot for voter approval. The resulting election brought one of the highest voter turnouts

[66] Planned Unit Development (PUD) is a zoning designation for large developments planned as a single continuous project to allow for more flexibility in land use and design. Oftentimes, a PUD will apply for variances from particular land use regulations in exchange for providing community benefits such as open space preservation, affordable housing, or parkland improvements.

[67] Impervious cover requirements refer to the percentage of land within a developed area that can be paved with concrete or asphalt. The 1986 Comprehensive Watersheds Ordinance established the first impervious cover limits for non-urban watersheds in the 40 % to 60% range.

[68] Jenny Staff, "S.o.s. 101," April 30, 1999, http://www.austinchronicle.com/news/1999-04-30/521885/.

in Austin local election history (almost 30 percent of the population) and the S.O.S Ordinance passed by a margin of 2 to 1.[69]

The S.O.S. Ordinance survived numerous legal and legislative challenges in the following years, but the Texas Supreme Court eventually declared the ordinance constitutional and legislative attempts to exempt developments from water quality standards unconstitutional. However, fearing political backlash from the development community, the City Council essentially granted exemptions from the S.O.S. Ordinance to all projects approved from 1992 to 1998.

The S.O.S. Ordinance, now over 20 years old, was a significant moment for Austin, because it galvanized the vested interests of residents wanting to preserve the sense of place that makes Austin unique, and engrained environmental concerns into the collective psyche of political leaders, regardless of affiliation. However, the legacy of the S.O.S. is difficult to assess relative to the intent to protect environmentally-sensitive areas of Austin from over-development. One criticism of S.O.S. is that proposed developments simply relocated to areas just outside the jurisdiction of the ordinance, though still over the Edwards Aquifer region, resulting in polluted water entering the Barton Springs watershed regardless. Another criticism is that restricting the amount of impervious cover allowable for new development increases the cost of construction and makes redeveloping those areas with a high percentage of impervious cover cost-prohibitive without changing regulations to accommodate denser development.[70]

---

[69] Amy Smith, "The SOS Ordinance Turns 20," August 3, 2012, http://www.austinchronicle.com/news/2012-08-03/the-sos-ordinance-turns-20/.

[70] A good example of this dilemma is the shopping center in Oak Hill (above the Edwards Aquifer), built before 1992 with 83 percent impervious cover. Several lots remain vacant because of the strict impervious cover requirements and when it rains, the runoff enters the Barton Springs watershed anyway. In 2007, Mayor Lee Leffingwell and City Council passed an ordinance to revise the rules for old or abandoned building sites in the Barton Springs Zone enough to encourage redevelopment and improve the status quo.

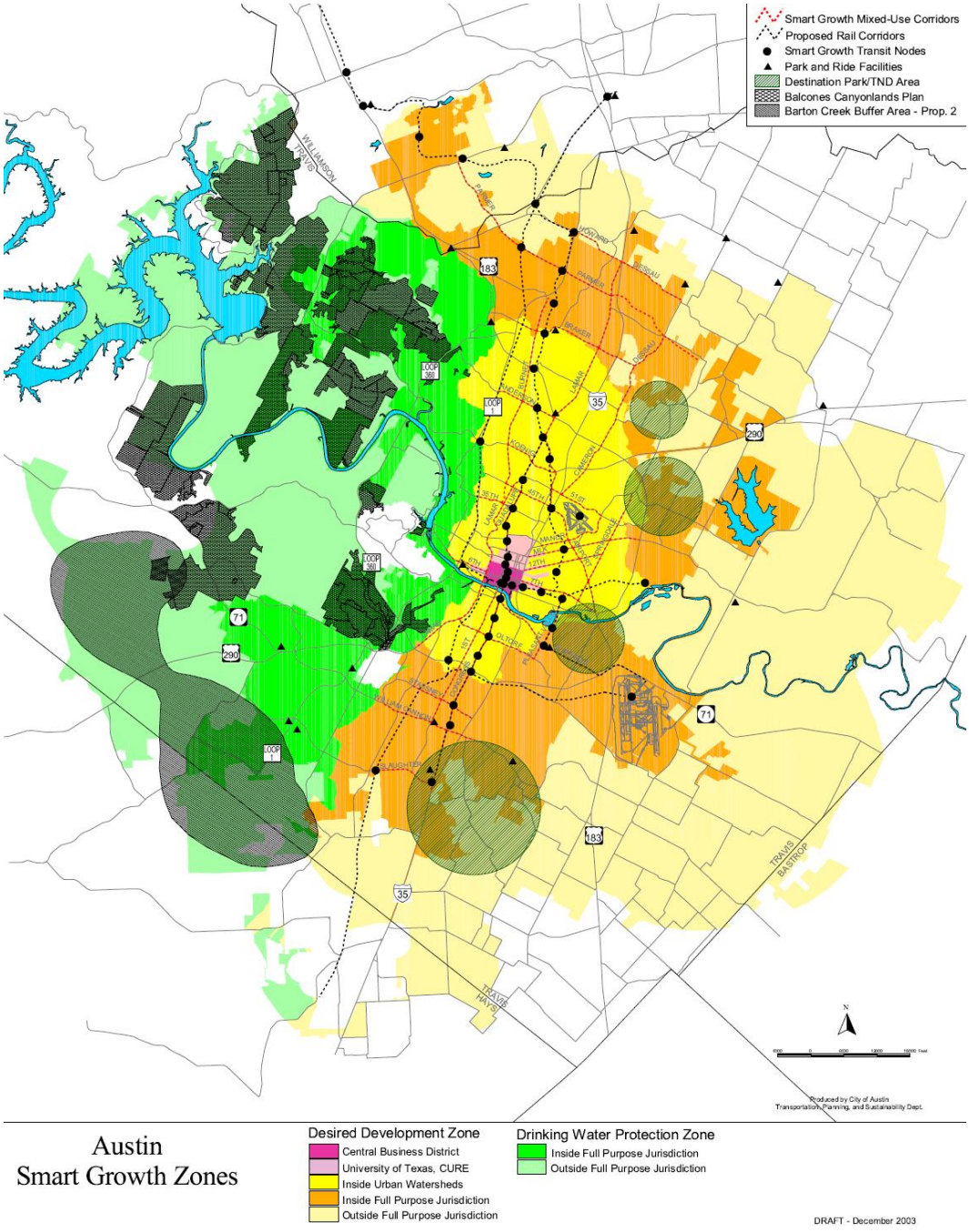
After several years of impasse on a viable long-term growth management strategy for the City of Austin, an eventual alliance fostered by mayor Kirk Watson in 1998 between the Chamber of Commerce, Real Estate Council, and Save Our Springs moved the city forward under a mutually beneficial strategy called Smart Growth. Recognizing the inevitability of rapid population growth and economic development across the city, Mayor Watson argued that the vitality and livability of Austin could be protected by incentivizing future development towards downtown and historically neglected east Austin, instead of fighting every development proposal over the Edwards Aquifer.

The eventual Smart Growth policy crafted by City Council identified the areas of the city that should be protected from future growth (Drinking Water Protection Zone or DWPZ), which areas should be developed (Desired Development Zones or DDZ, including downtown, the University of Texas, and all areas east), and what thoroughfares should be designated "Smart Growth corridors" (see Figure 3.5 for a map of the Smart Growth Zones). In May 1998, Austin voters approved $65 million in bonds to purchase development rights to land within the DWPZ and allowed the City of Austin to approve development proposals using Smart Growth criteria.[71] In the years that followed, voters approved millions of dollars in bonds to protect open space, increasing the percentage of protected land from 3 percent to 34 percent (see Figure 3.6).[72] Other consequences of Smart Growth include the rapid redevelopment of downtown Austin and other underutilized sections of the urban core, and the adoption of the Neighborhood Planning process to allow input from neighborhood associations for future development standards.

---

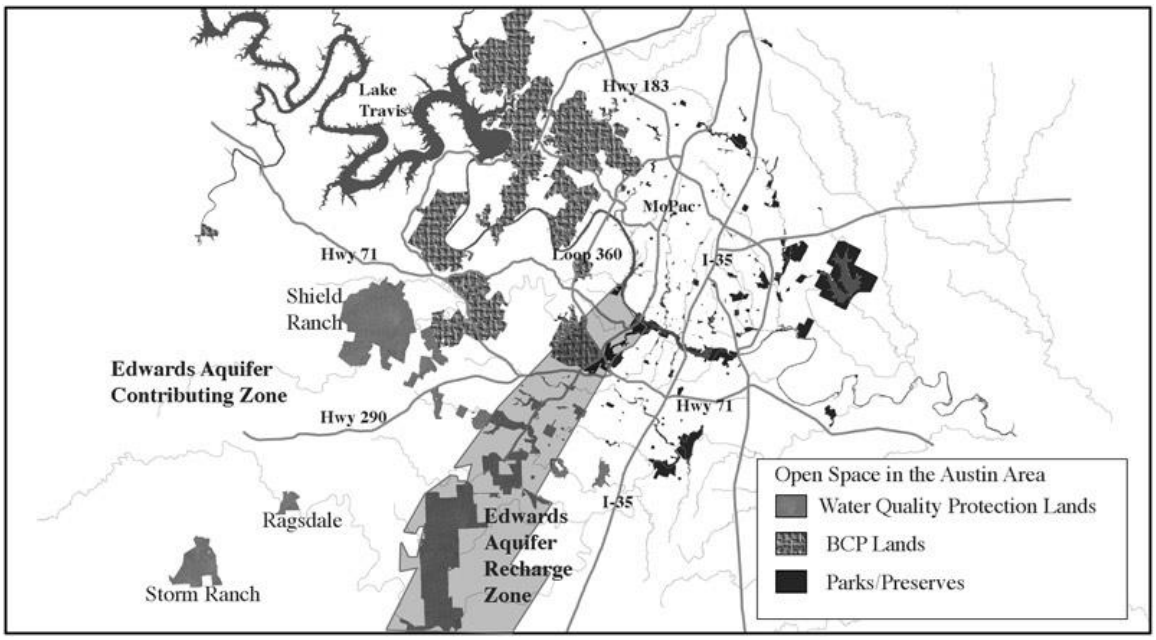
[71] Joel Warren Barna, "The Rise and Fall of Smart Growth in Austin," *Cite Magazine*, Spring 2002.
[72] "Save Our Springs Ordinance Now 20 Years Old," accessed February 25, 2013, http://www.statesman.com/news/news/local/save-our-springs-ordinance-now-20-years-old/nRNJP/.

Figure 3.5: Austin Smart Growth Zones (2003)[73]



[73] City of Austin, Transportation, Planning, and Sustainability Department, "Austin Smart Growth Zones," December 2003, http://www.utexas.edu/depts/grg/adams/374/smartgrowthmap.pdf.

Figure 3.6: Map of Open Space in the Austin area (as of 2010)[74]



ANNEXATION

Annexation is an important tool for local governments to manage future population growth and development and recover a portion of the cost of providing services that benefit the broader region or state. Annexation is an especially important policy tool for Texas cities, because unlike many other states, Texas does not provide state-generated revenue transfers to municipalities. Recognizing the need for assistance in financing services and facilities that benefit areas beyond a city's incorporated jurisdiction, Texas state law grants local governments broad authority to incorporate adjacent areas through annexation.[75]

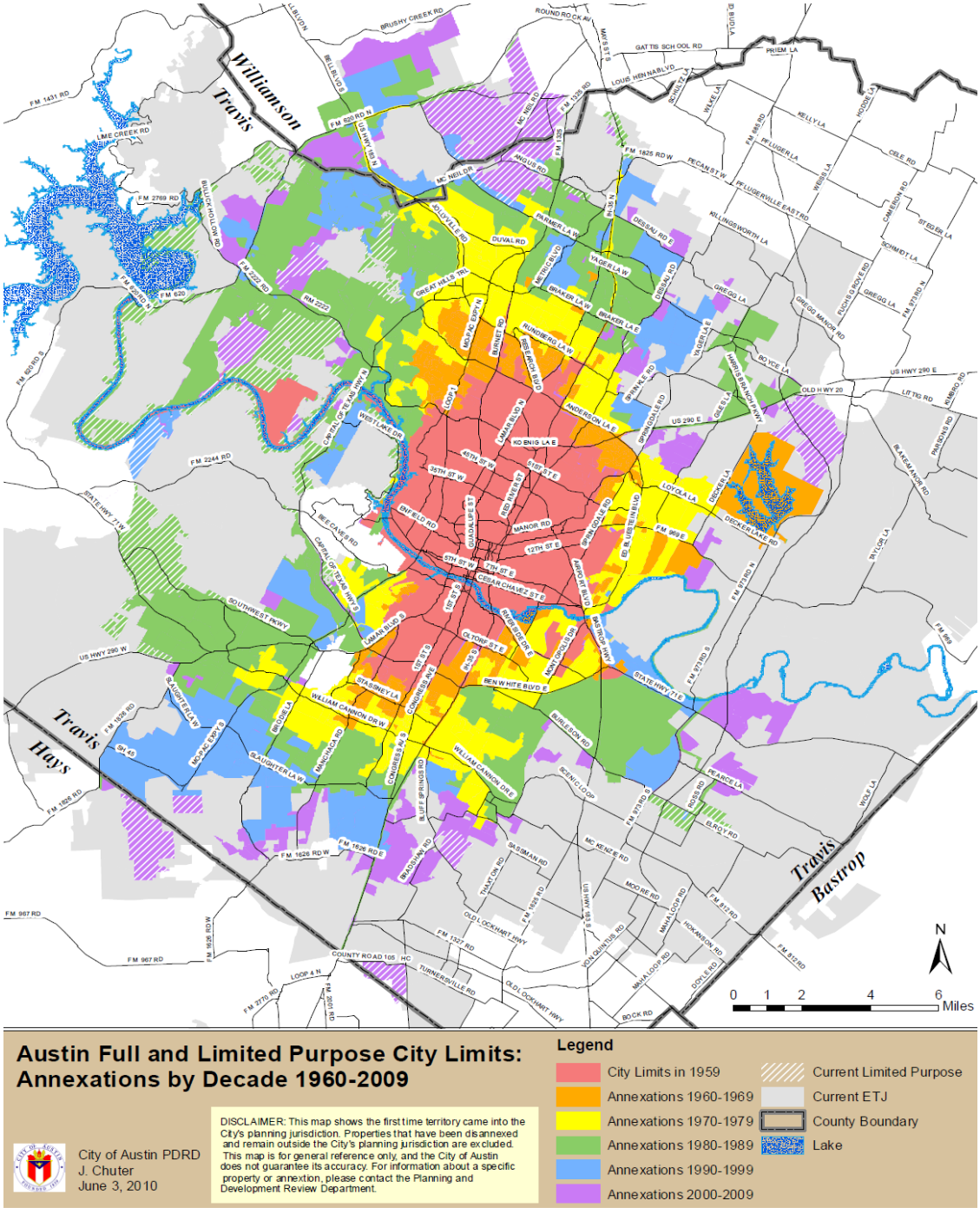
The 1963 Municipal Annexation Act established procedures for annexation and created the concept of extraterritorial jurisdiction (ETJ), which gave cities the ability to

[74] William Scott Swearingen, *Environmental City*.
[75] For a detailed history and analysis of annexation law in Texas, see Scott Houston, *Municipal Annexation in Texas: Is It Really That Complicated?* (Texas Municipal League, 2003), http://www.tml.org/legal_pdf/ANNEXATION.pdf.

plan for future growth within a certain distance outside the current full-purpose city limits.[76] From 1963 to the mid-1980s, Texas cities, including Austin, enjoyed relatively few restrictions from the Legislature and most major cities pursued aggressive annexation strategies as a result of rapid population growth. Figure 3.7 shows a map of annexation in Austin by decade from 1960 to 2009, underscoring the rapid expansion during the 1970s and 1980s.

76 City of Austin, Planning and Development Review Department, "Planning the Extraterritorial Jurisdiction," accessed February 13, 2013, http://www.austintexas.gov/department/planning-extraterritorial-jurisdiction.

Figure 3.7: City of Austin Annexations by Decade 1960-2009[77]



[77] Jackie Chuter, "Austin Full and Limited Purpose City Limits: Annexations by Decade 1960-2009," accessed February 13, 2013, http://www.austintexas.gov/sites/default/files/files/Planning/Annexation/Annexations_by_Decade.pdf.

In response to growing concerns from rural landowners and agricultural interests, the Legislature intervened in the 1980s to restrict unilateral annexations, and effectively made the process more difficult and expensive for cities. Since the 1980s, there have been numerous attempts by rural Legislators to further restrict annexation authority, the most significant being the passage of Senate Bill (SB) 89 in 1999. SB 89 requires cities to adopt an "annexation plan" for all territory with more than 100 residential dwellings planned for annexation, places a minimum three-year waiting period on annexation of that territory, and requires full-service provision within 2½ years.[78]

SB 89 was in many ways a response to several annexation battles across the state in the 1990s, the most controversial involving Circle C Ranch (hereafter Circle C) by the City of Austin in 1997. Plans for Circle C were developed by Gary Bradley (part-owner of the Schlotzsky's restaurant chain) and included a large, master-planned community with golf courses, pools, and a childcare center within the Austin extraterritorial jurisdiction (ETJ). The master plan for the development was approved in 1983, and a consent agreement in 1984 designated Circle C a Municipal Utility District (MUD) of the City of Austin, meaning the City absorbed a percentage of the cost of providing water and sewer lines to the development in exchange for Circle C following certain land uses and development standards for the property.[79]

Tension between Circle C and the City of Austin ensued with the eventual passage of the S.O.S. Ordinance in 1992, which forced the developers to cancel future planned housing and amenities in Circle C to comply with the stricter impervious cover requirements. After failing to challenge the constitutionality of the S.O.S Ordinance in

---

[78] Fred Bosse, et al., *SB 89*, 1999, http://www.legis.state.tx.us/billlookup/History.aspx?LegSess=76R&Bill=SB89.
[79] Kayte Vanscoy, "Dotting I's, Circling C's," *The Austin Chronicle*, December 19, 1997, http://www.austinchronicle.com/news/1997-12-19/519285/.

the Texas Supreme Court, the Circle C developers were able to secure passage of two laws in the 1995 legislative session (Senate Bill 1017 and House Bill 3193). These bills essentially allowed Circle C to create its own water district that would be exempt from the S.O.S Ordinance or annexation by another governmental entity and, more importantly, would allow the developers to build out Circle C according to the original master plan.[80]

Meanwhile, the City of Austin challenged the legality of SB 1017 and HB 3193 and moved forward quickly with plans for annexation of Circle C, despite growing resistance from the homeowners association. Eventually, the Texas Supreme Court struck down SB 1017 and HB 3193, and approved the annexation of Circle C into the City of Austin in December 1997. Since that time, annexation has become a controversial topic for the City of Austin, and with the passage of stricter regulations through SB 89 in 1999, the City of Austin is now required to propose potential annexations three years in advance, secure resident support through petition, and carefully negotiate development and service agreements prior to annexation.

To prevent further harmful annexation legislation, the Texas Municipal League (TML), a nonprofit association of local government officials and staff, commissioned a study in 2003 of the economic impact of increased regulation and restriction of annexation authority. The study found that restricting annexation would result in a loss of more than $300 billion in gross state product over the next 30 years, and the state would lose 1.2 million jobs and 2.3 million in population.[81] TML also notes that if annexation

[80] Ibid.
[81] Scott Houston, *Municipal Annexation in Texas*, 10.

authority were to be eliminated, Texas would become the only state in the nation that denies both state financial assistance and annexation authority to its cities.[82]

TRANSPORTATION

One of the most visible effects of rapid growth in Austin over the last 30 years is the increase in traffic congestion, particularly along the major north-south corridors of I-35 and Mo-Pac (Loop 1). In fact, Austin has the highest travel time index among comparable-sized cities (1.32), and the 4th highest of any U.S. city, meaning a rush-hour trip takes 32 percent longer on average than one in free-flowing traffic.[83] The average commuter spends 44 hours a year delayed in traffic, an increase of 340 percent since 1982 and the 3rd highest increase among comparable-sized cities.[84] Time spent idling in traffic produces an estimated 400 additional pounds of CO2 emissions a year per automobile, or over 4 percent of the total emissions produced in free-flow traffic.[85] Finally, the Texas Transportation Institute estimates the total cost of congestion for Austin residents in 2011 at $930 million a year in lost time and excess fuel consumed.[86]

In response to the dire traffic situation and public concern over this issue, the City of Austin and other local agencies have partnered together to increase the availability of public transit and encourage alternative transportation modes like walking and biking. In 2004, voters approved Austin's first commuter rail project (MetroRail), and ridership has tripled from the first year of service (2010) to 2012.[87] Shortly after voters approved the

---

[82] Ibid., 15.
[83] Texas Transportation Institute, "2012 Urban Mobility Report," December 2012, 54, http://mobility.tamu.edu/ums/report/.
[84] Ibid., 55.
[85] Ibid., 37.
[86] Ibid., 25. This estimate was calculated using the Value of travel time delay (estimated at $16 per hour of person travel and $88 per hour of truck time) and excess fuel consumption (estimated using state average cost per gallon for gasoline and diesel).
[87] Capital Metro, "Capital Metro Ridership Soars in 2012," January 19, 2013, http://www.capmetro.org/news-item.aspx?id=1953.

MetroRail commuter line, the Austin City Council passed the Transit-Oriented Development (TOD) ordinance, which established TOD districts around several rail stations, and amended development standards to require more mixed-use, walkable communities near station platforms to reduce the reliance on the automobile.[88] Other considerations on the horizon include dedicated lanes for buses and tolls along major highway corridors, a regional commuter rail line connecting passengers from Georgetown to San Antonio, and urban rail running from the Austin-Bergstrom International Airport, through downtown and the University of Texas, and connecting to the current MetroRail commuter line.

Several positive signs for the traffic situation in Austin include a 30 percent reduction in the number of hours delayed in traffic since 2005 and a 12 percent reduction in vehicle miles traveled between 2002 and 2006, the largest reduction of any major U.S. city. [89,90] Furthermore, in 2009, the majority of Austin workers (71.8) had commutes of thirty minutes or less, generally shorter than those in Dallas, Houston, San Antonio, Portland, or Seattle.[91]

AFFORDABILITY

An important component of maintaining a high quality of life in Austin is ensuring affordability. In fact, some of the core principles of the recently approved Imagine Austin Comprehensive Plan are to "develop an affordable and healthy community…to strive to contain Austin's cost of living…to provide high public value

---

[88]For a summary of the TOD ordinance, see http://www.ci.austin.tx.us/planning/tod/downloads/Ordinance_Summary_5_6_06.pdf.

[89] Texas Transportation Institute, "2012 Urban Mobility Report," 55.

[90] Robert Puentes and Adie Tomar, "The Road…Less Traveled: An Analysis of Vehicle Miles Traveled Trends in the U.S." (The Brookings Institution, December 2008), http://www.brookings.edu/research/reports/2008/12/16-transportation-tomer-puentes.

[91] City of Austin, "Imagine Austin Comprehensive Plan," 41.

with tax dollars to deliver quality, affordable amenities that all Austinites can enjoy."[92] This core principle underscores one of the primary motivations for this report: to assess how the City of Austin has allocated resources over a 30-year period and to recommend ways to continue delivering high-quality services at minimal cost.

The public emphasis on affordability in Austin stems primarily from the rapid increase in housing values over the past decade, and the corresponding increase in property taxes. For example, between 1998 and 2008, the median single-family house price increased by almost 90 percent ($129,900 to $240,000) while median family income increased by only 36 percent.[93] Likewise, a comparative study of the top 50 largest U.S. cities analyzing property taxes for a median-value home ranks Austin in the top seven, and the highest in Texas ($4,171 net tax for a $199,300 median sales price).[94] Figure 3.8 shows a comparison of property taxes paid in FY 2011-12 among other major cities in Texas, highlighting the portion paid to the City of Austin is second only to the City of Dallas.

Despite rapid increases in property values and taxes for certain parts of the city, Austin as a whole still remains below the national average for cost of living. Figure 3.9 shows a comparison of the Cost of Living Index for other major cities, and Austin's score of 92.8 ranks below the U.S. average of 100 and below cities like Atlanta, Dallas, Denver, Phoenix, and Raleigh. Moreover, with the absence of personal and corporate income taxes, Texas residents enjoy one of the nation's lowest tax burdens ($3,440 per capita compared to $4,112 per capita nationally).[95] Nonetheless, the issue of affordability

---

[92] Ibid., 11.
[93] Ibid., 28.
[94] Minnesota Taxpayers Association, "50-State Property Tax Comparison Study: Payable 2011," March 2012, http://www.fiscalexcellence.org/policy/property-taxes/example-article-2.html.
[95] The Greater Austin Chamber of Commerce, "Cost of Living," accessed February 13, 2013, http://www.austinchamber.com/do-business/data-research/area-profile/cost-of-living.php.

remains vital for low- and moderate-income Austin residents who are no longer able to keep up with rising rents and property taxes in once affordable neighborhoods.

Figure 3.8: FY12 Property Tax Bill on Median-Value Home[96]

FY12 Property Tax Bill on Median-Value Home

	Austin	Dallas	Forth Worth	Houston	San Antonio
	$182,228	**$158,500**	**$110,600**	**$153,700**	**$151,200**
Taxing Jurisdictions:					
City	$877	$1,011	$757	$785	$855
County	$708	$321	$292	$481	$448
School District	$2,077	$1,647	$1,264	$1,249	$1,781
Community College	$168	$126	$165	$134	$214
Health/Hospital	$115	$344	$252	$236	$418
TOTAL	**$3,944**	**$3,449**	**$2,751**	**$2,917**[1]	**$3,787**

Notes: Net of homestead exemptions. 2011 median value for Austin per Travis County Appraisal District; for other Texas cities, per sales data from Texas A&M Real Estate Center.
[1]Includes amounts paid to Port of Houston Authority and Harris County Education Department, $22.82 and $8.09, respectively.

[96] City of Austin, Budget Office, "2012-2013 Proposed Budget Response to Request for Information," August 2, 2012.

Figure 3.9: Cost of Living Index for Major U.S. Cities[97]

	Composite	Grocery (13.36%)	Housing (28.64%)	Utilties (10.46%)	Transportation (10.66%)	Health care (4.44%)	Misc. (32.44%)
Atlanta	97.4	101.7	89.4	93.4	102.1	101	101.8
Austin	92.8	85	82.3	99.1	101.1	102.1	99.3
Boston	137.4	118.9	160.6	147.3	106.8	121.1	133.6
Chicago	114.8	114.5	134.2	97.6	114.6	106.9	104.6
Dallas	96.3	100.7	75.4	108.1	105	104.5	105
Denver	105.1	102.7	113.2	90	95.1	106.5	106.9
Los Angeles	133	107.6	197.3	112.3	109	110	104.5
NY (Manhattan)	219.2	148.8	414.6	143.6	122.9	127.7	144.1
Phoenix	96.6	103.9	87.4	100.3	102.9	102.6	97.6
Raleigh	93.8	101.4	79.9	104.5	96.6	100.3	97.8
Salt Lake City	94.7	94.2	94.4	77.3	96.7	95.9	100
San Francisco	162.9	115.9	283.8	91.2	111.5	112.3	122.4

Rapid growth in Austin over the past 30 years has led to issues around demographic changes, the politics of growth management, annexation policy, transportation, and affordability. These issues have galvanized public discussion on how to preserve the high quality of life in Austin, and in response, the City of Austin has been a crucial part of the community solution. The following chapters will analyze how the City of Austin has allocated resources amidst decades of facing these challenging issues, in order to provide recommendations for budgeting and service delivery in the future.

[97] The Greater Austin Chamber of Commerce, "Cost of Living."

Chapter 4: Analyzing the City of Austin's Budget: 1982-2011

To overcome the lack of a comprehensive, multi-decade analysis of local government revenues, expenditures, and performance data for the City of Austin, this chapter presents a compilation of financial data for the previous 30 years, with a comparison of public expenditures to key performance indicators and citizen feedback. The benefits of such a comprehensive approach will allow future city managers, political leaders and citizens to take a longer view of the city's financial history, and to better incorporate performance data and citizen input when allocating resources among numerous local government functions.

METHODOLOGY

In the Comprehensive Annual Financial Report (CAFR), the City of Austin reports the following types of governmental funds for the administration of financing requirements: the general fund, special revenue funds, debt service funds, capital projects funds, and permanent funds. The focus of this chapter's analysis will be the funds financed through taxes and fees that are most visible and paid by the highest proportion of Austin residents (property and sales taxes). These include the funds for primary operating expenditures (General Fund), debt service, and capital projects. The revenue and expenditure data for the City's enterprise departments (utility provision, aviation, and tourism) and grant-funded departments (housing), are excluded from this analysis given the lack of direct taxpayer financing for these services.[98]

The time period chosen for this analysis is 1982 to 2011, the latest 30 year range with available audited financial data. The primary source for data on expenditures,

[98] The transfer of operating profit from the utility providers to the General Fund is accounted for in the subsequent analysis. The City of Austin is unique among major U.S. cities because of its ownership of an electric utility (Austin Energy), which comprises over 2/3 of the City's total revenue and budgeted expenditures.

revenues, and tax levies was the Comprehensive Annual Financial Reports for the City of Austin for each year ended September 30th.[99] Other sources used for performance measures and citizen feedback include annual Amended Budget and Performance Report documents (select years) and annual Citizen Surveys (select years).[100] To more accurately illustrate the trends in financial data over a multi-decade time period, the data were normalized for inflation and population growth. Revenue and tax data were adjusted using the Consumer Price Index for Urban Consumers,[101] expenditure data were adjusted using the Price Indexes for State and Local Government Consumption Expenditures and Gross Investment,[102] and all per capita figures use September 30th population estimates by the City of Austin demographer reported in each year's Comprehensive Annual Financial Report.

Revenue and expenditure data are organized into categories consistent with how the City of Austin currently reports these figures in the CAFR documents, using generally accepted accounting principles (GAAP) as prescribed by the Governmental Accounting Standards Board (GASB). As the City of Austin's organizational structure and financing practices have evolved over this time period, reporting of governmental functions and

---

[99] City of Austin, Financial and Administrative Services Department, "Austin Finance Online," accessed January 29, 2013, https://www.austintexas.gov/financeonline/finance/financial_docs.cfm?ws=1&pg=1. Data from non-electronic versions of these documents accessed in the City of Austin Budget Office library.

[100] David McKay and Eduardo Galvan, "Measuring Customer Service in the Municipality: Results of the 1998 Voice of the Customer and Employee Surveys" (Organization Research and Human Resources Department, September 1998); City of Austin, "2002 Community Scorecard," October 2002; Creative Consumer Research, "2007 City of Austin Citizen Survey," 2007; ETC Institute, "2011 City of Austin Community Survey," October 2011, https://assets.austintexas.gov/budget/11-12/downloads/austin_2011_survey_final_report.pdf.

[101] U.S. Bureau of Labor Statistics, "Consumer Price Index - All Urban Consumers (Dallas-Fort Worth, TX)," *Databases, Tables & Calculators by Subject*, accessed April 7, 2013, http://www.bls.gov/data/#prices.

[102] U.S. Bureau of Economic Analysis, "Table 3.9.4. Price Indexes for Government Consumption Expenditures and Gross Investment," *National Income and Product Account (NIPA) Tables*, accessed January 29, 2013, http://www.bea.gov/iTable/iTable.cfm?reqid=9&step=3&isuri=1&910=x&911=0&903=97&904=1982&905=2012&906=a#reqid=9&step=3&isuri=1&910=x&911=0&903=97&904=1982&905=2012&906=a.

revenue have changed as well. Thus, as a consequence of frequent changes in reporting structure in the CAFR documents, some consideration in data compilation was given to provide a more consistent categorical representation of revenues and expenditures.[103]

BUDGET OVERVIEW

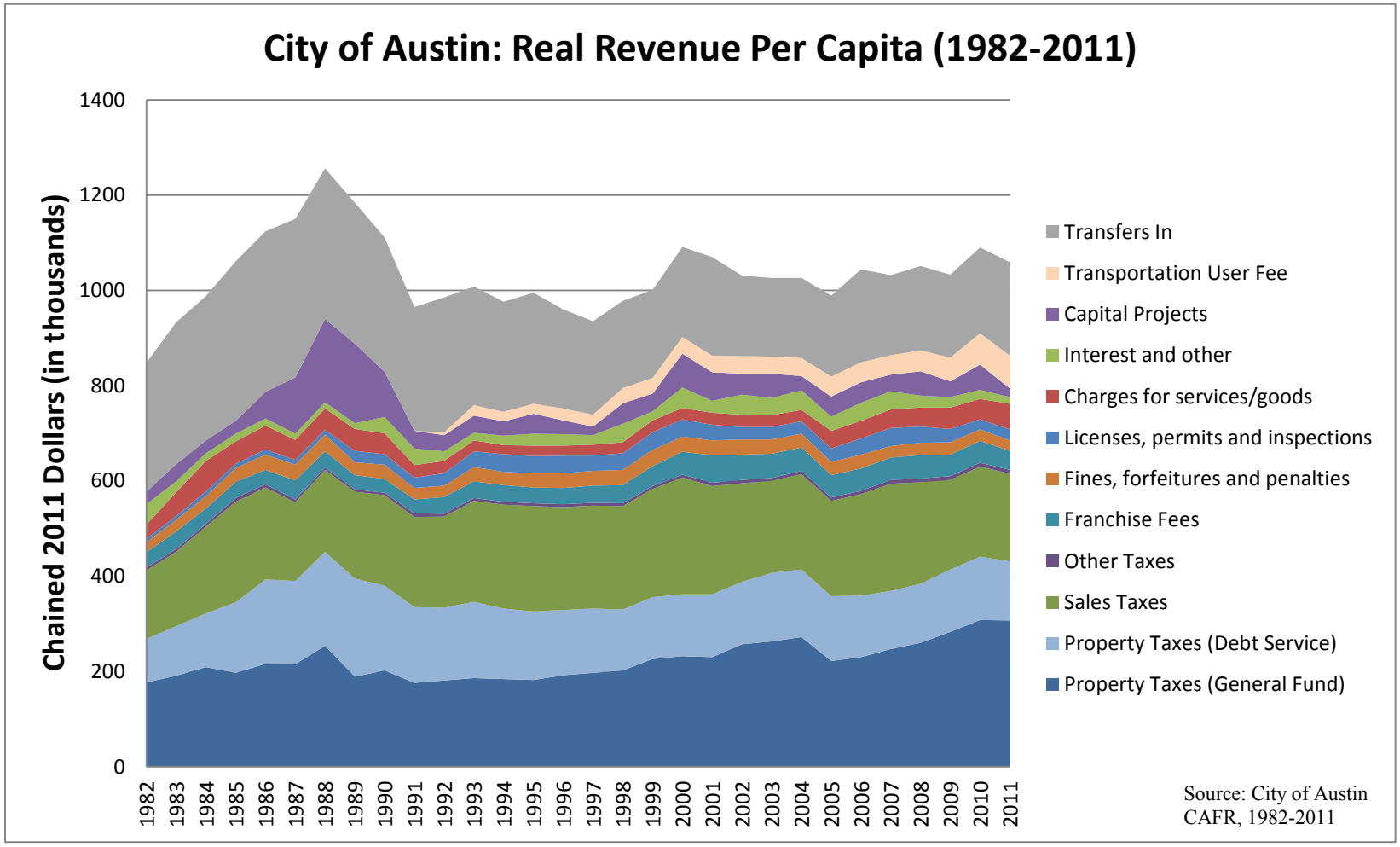
From 1982 to 2011, nominal revenues for General Fund activities, debt service, and capital projects increased from $143.8 million to $870.3 million, while nominal expenditures increased from $160.1 million to $1.02 billion. However, adjusting for inflation and population growth, the trend is less pronounced. For example, real revenues per capita increased 48 percent from 1982 to 1988 and declined 16 percent from 1988 to 2011, an overall 30 year increase of 25 percent. Moreover, real expenditures per capita increased 42 percent from 1982 to 1988 and declined 24 percent from 1987 to 2011, an overall 30 year increase of 7 percent.[104]

REVENUE

Revenue data used in the analysis for this report are organized into broad categories based on reporting in the CAFR: Taxes; Fees; Fines and Penalties; Charges for Services/Goods; Interest; Capital Projects; and Transfers In. Figure 4.1 shows the 30-year history of real revenue per capita for revenue sources within these categories.

[103] One example is the decision to create an "Administrative Overhead & Special Funds" category, which was previously reported as separate categories: "Administration," "Supportive Services" and "Fiscal Management", but is currently reported as "General City Responsibilities", and "Transfers Out".
[104] For source data and graphs of nominal and real revenues and expenditures, see Appendices.

Figure 4.1: City of Austin: Real Revenue Per Capita (1982-2011)



Property Taxes

Property tax revenue collected on assessed residential and commercial properties is allocated to both General Fund and debt service requirements, according to the annual tax rate approved by the Austin City Council.[105] From 1982 to 2011, General Fund property tax revenue increased from $30.0 million to $251.9 million, and property tax revenue dedicated to debt service requirements increased from $15.4 million to $101.6 million. Adjusting for inflation and population growth, General Fund property tax revenues increased 73 percent, from $177 to $307 per capita, and property tax revenue for debt service increased 36 percent, from $91 to $124 per capita.

The largest percentage increase in property tax revenue occurred between 1982 and 1988 (70 percent), when the combined property tax revenue reached a high mark of $451 per capita, likely as a result of rapid growth in population and demand for city services amidst declining home prices and economic recession in Texas during this period.[106] Since 1988, total property tax revenue per capita has actually declined 4 percent, largely as a result of declining debt service payments (see Figure 4.3). The percentage of total revenue generated from property taxes has steadily increased over time, from 32 percent in 1982 to a high of 40 percent in 2003-2004, and was 36 percent in 2011. In 2011, 53 percent of property taxes

[105] Figure 4.2 shows the percentage of assessed taxable value by property class (Single Family, Multi-Family, Commercial, Multifamily, Land, and Personal).

[106] For an excellent analysis of housing prices in Texas since 1982, see: Jesse Weiher, "A Brief Examination of Previous House Price Declines" (Federal Housing Finance Agency, June 2009), 10, http://www.fhfa.gov/webfiles/2918/previousdownturns61609.pdf.

Figure 4.2: 2011 Assessed Taxable Property Value by Class

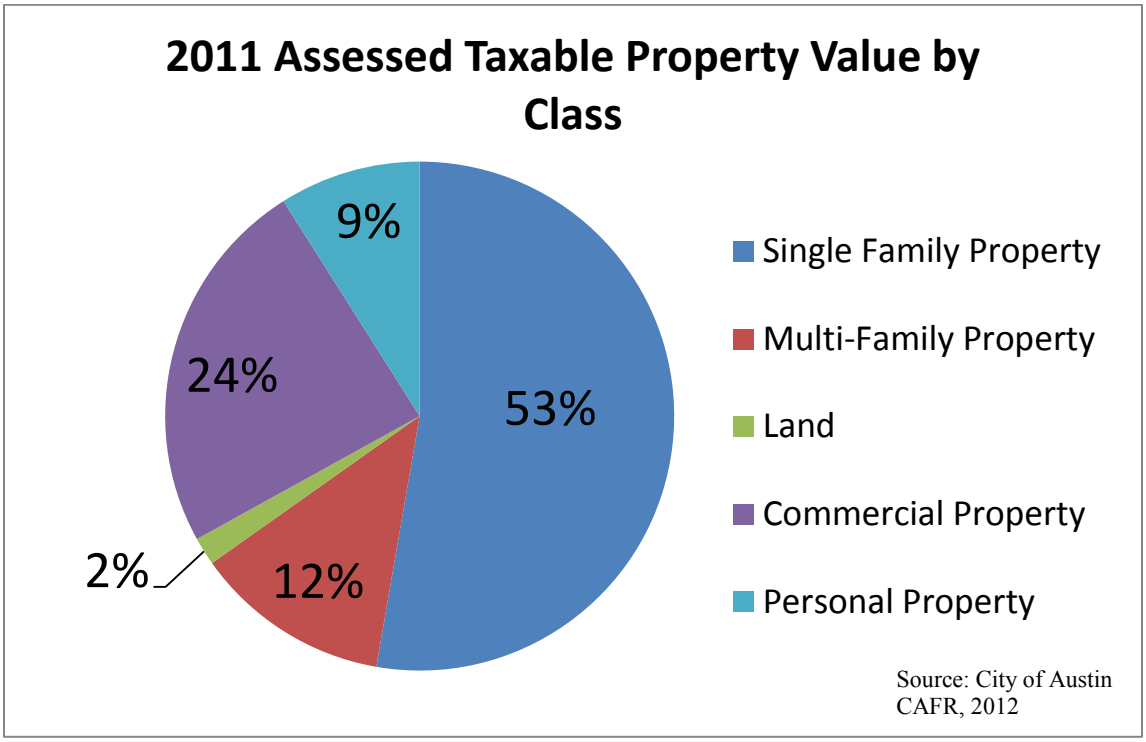
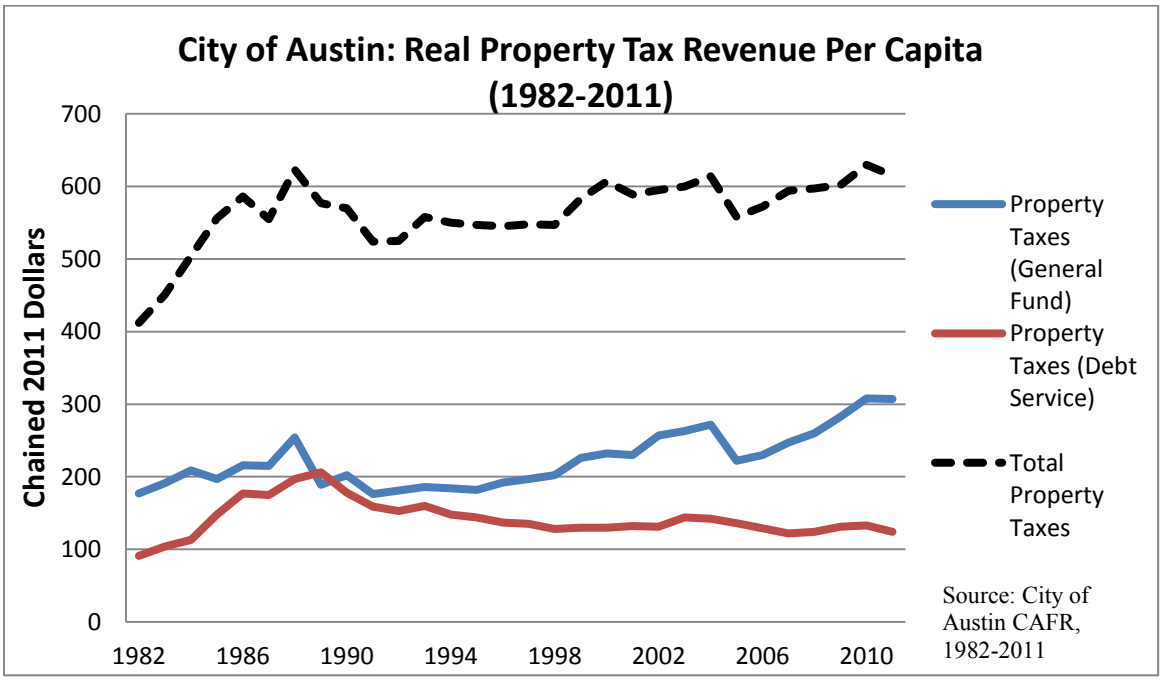


Figure 4.3: Real Property Tax Revenue Per Capita (1982-2011)



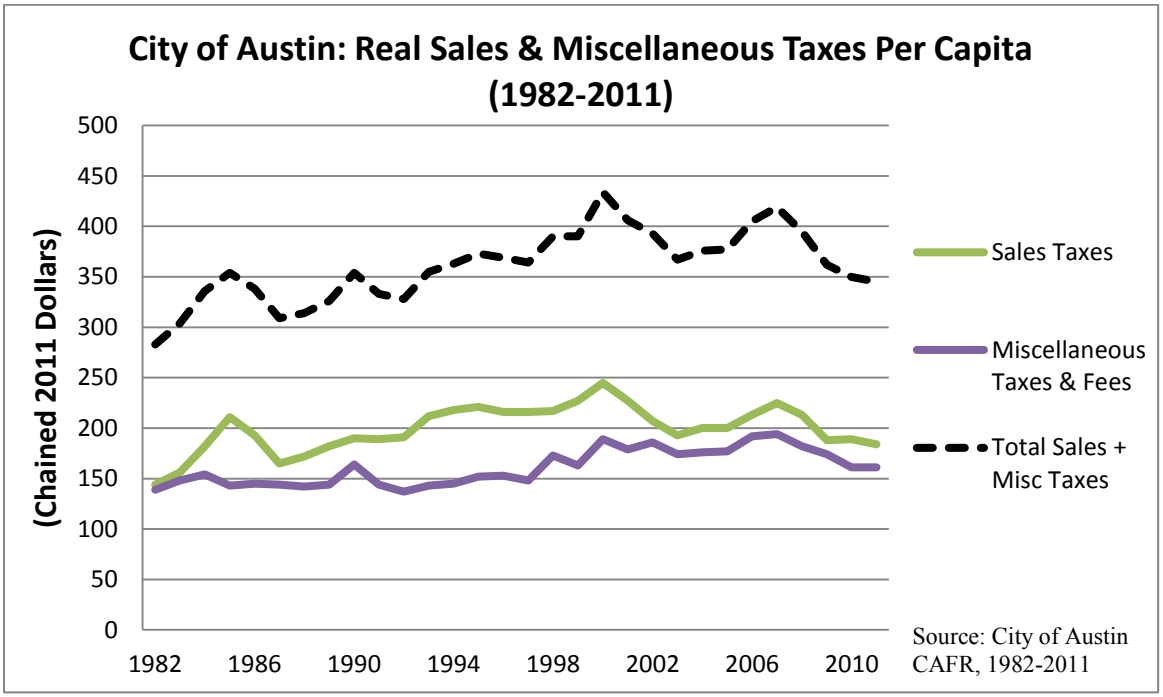
Sales Tax and Miscellaneous Revenue

The City of Austin levies a 1 percent sales tax on all non-exempt taxable items purchased within its jurisdiction to fund General Fund activities.[107] From 1982 to 2011, sales tax revenue increased from $24.4 million to $151.1 million. Adjusting for inflation and population growth, sales tax revenue increased from $144 in 1982 to as high as $245 per capita in 2000, and was $184 per capita in 2011. Indicative of the relative volatility of sales tax revenue, the percentage of total revenue from sales tax has fluctuated from 17 percent in 1982, increased to as high as 23 percent by 1997, and fell back to 17 percent in 2011.

Miscellaneous sources of revenue include: mixed beverage taxes ("Other Taxes"), franchise fees; fines, forfeitures and penalties; licenses, permits and inspections; charges for goods and services; and interest. From 1982 to 2011, revenue from these sources increased from $23.6 million to $132.3 million. Adjusting for inflation and population growth, revenue from these sources increased from $139 per capita in 1982 to as high as $194 per capita in 2007, and was $161 per capita in 2011. The percentage of overall revenue from these sources has remained stable over time, though there have been fluctuations between the specific revenue sources. For example, as interest rates (and interest revenue) have decreased since 1982, revenue from licenses permits and inspections and service charges by users of Emergency Medical Services (EMS) have increased. Figure 4.4 provides a comparison of sales tax revenue with miscellaneous taxes and fees over this time period.

[107] A notable exception to the General Fund provision includes sales tax revenue collected within the 18 Tax Increment Financing (TIF) zones that fund specific economic development projects.

Figure 4.4: Real Sales and Miscellaneous Taxes Per Capita (1982-2011)



Transportation User Fee (TUF)

Austin is one of a handful of cities in the United States to have a dedicated source of revenue for public works and transportation projects. In 1991, the Austin City Council passed an ordinance to establish a Transportation User Fee (TUF) to be collected through monthly electricity bills from residents who own or drive a car. Eventually, General Fund revenue for street maintenance and transportation projects was repurposed elsewhere, leaving the TUF and other non-General Fund revenue to fund the Public Works and Transportation departments. From 1993 to 2011, revenue from the TUF increased from $6.9 million to $57.0 million, or $22 to $69 per capita after adjusting for inflation and population growth.

Utility Transfer

The most significant source of revenue for the City of Austin is the transfer of operating profit from the public utilities (Austin Energy and Austin Water Utility) into the General Fund. From 1982 to 2011, the utility transfer increased from $46.0 million to $161.2 million. However, adjusting for inflation and population growth, this revenue declined 42 percent from the peak amount in 1986 and 28 percent over the 30 year time period. Moreover, the overall percentage of General Fund revenue from the utility transfer has decreased from 32 percent in 1982 to less than 19 percent in 2011, likely the result of recommendations by the Austin City Council and financial staff to reduce the city's operational reliance on utility revenue transfers. This strategy was prescient, because in 2002, the Texas Legislature deregulated the retail electricity market in Texas, and since that time, there have been numerous failed attempts to allow competing electric providers to operate within Austin Energy's service area.[108]

OTHER LOCAL GOVERNMENT TAXES

In addition to the City of Austin, there are other governmental entities that operate within Travis County, and understanding the overall property tax impact on Austin residents will provide context for the changes in City of Austin revenues over time. As of 2011, there were five primary taxing jurisdictions for households and businesses residing in the non-periphery city limits of Austin: the City of Austin, Travis County, Central Health, Austin Community College (ACC), and the Austin Independent School District (AISD).[109] The three largest entities (City of Austin, Travis County, and AISD) collect

---

[108] Laylan Copelin and Marty Toohey, "Legislation Seeks to Open up Austin Energy to Competition," *The Austin American-Statesman*, March 3, 2011, http://www.statesman.com/news/news/local/legislation-seeks-to-open-up-austin-energy-to-comp/nRX3H/.

[109] Central Health was created in May 2004 by a vote of Travis County residents as a separate political subdivision of the State of Texas to coordinate and finance healthcare for the underserved, a role previously assumed by both the City of Austin and Travis County. In 2012, voters approved a 5 cent property tax

over 91 percent of the overall property tax revenue. Table 4.1 provides a summary of the changes in real property tax revenue per capita and Figure 4.5 provides a visual representation of these changes over time.

Adjusting for inflation and population growth over this time period, per capita property tax revenue from residential and commercial properties for the City of Austin increased 70 percent from 1982 to 1988 and decreased 5 percent from 1988 to 2011, an overall 30 year increase of 62 percent. Per capita property tax revenue for Travis County increased 109 percent from 1982 to 1988 and increased 80 percent from 1988 to 2011, an overall 30 year increase of 277 percent. Revenue for AISD increased 76 percent from 1982 to 1988 and increased 15 percent from 1988 to 2011, an overall 30 year increase of 102 percent. Overall, the property tax revenue collected by the five primary jurisdictions increased 83 percent from 1982 to 1988 and increased 26 percent from 1988 to 2011, an overall 30 year increase of 130 percent.

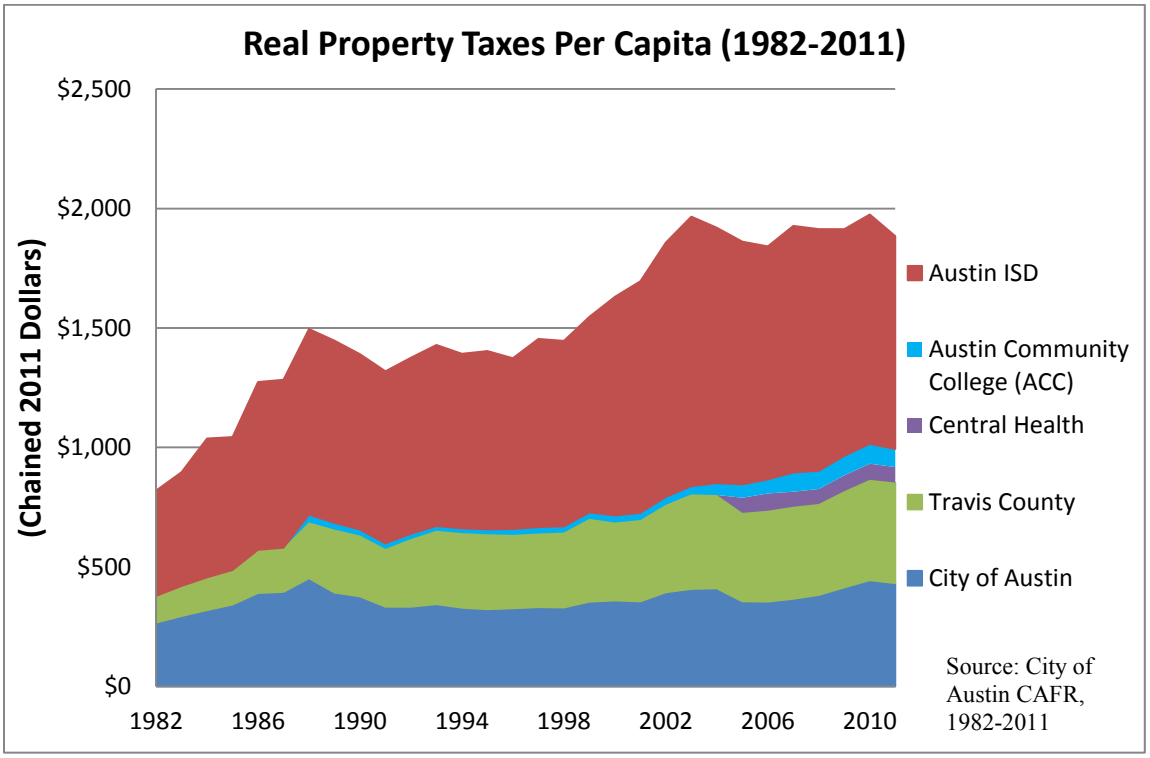
Table 4.1: Summary of Changes in Real Property Tax Revenue Per Capita

Jurisdiction	1982	1988	2011	% Change 1982-1988	% Change 1988-2011	% Change Overall
City of Austin	$267	$453	$432	70%	-5%	**62%**
Travis County	$112	$234	$421	109%	80%	**276%**
AISD	$441	$777	$891	76%	15%	**102%**
ACC	$0	$33	$76	-	130%	-
Central Health	$0	$0	$65	-	-	-
Total	***$820***	***$1,497***	***$1,885***	**83%**	**26%**	**130%**

Source: City of Austin Comprehensive Annual Financial Report (CAFR), 1982-2011

increase to finance expanded health care services for the new medical school and teaching hospital affiliated with the University of Texas at Austin.

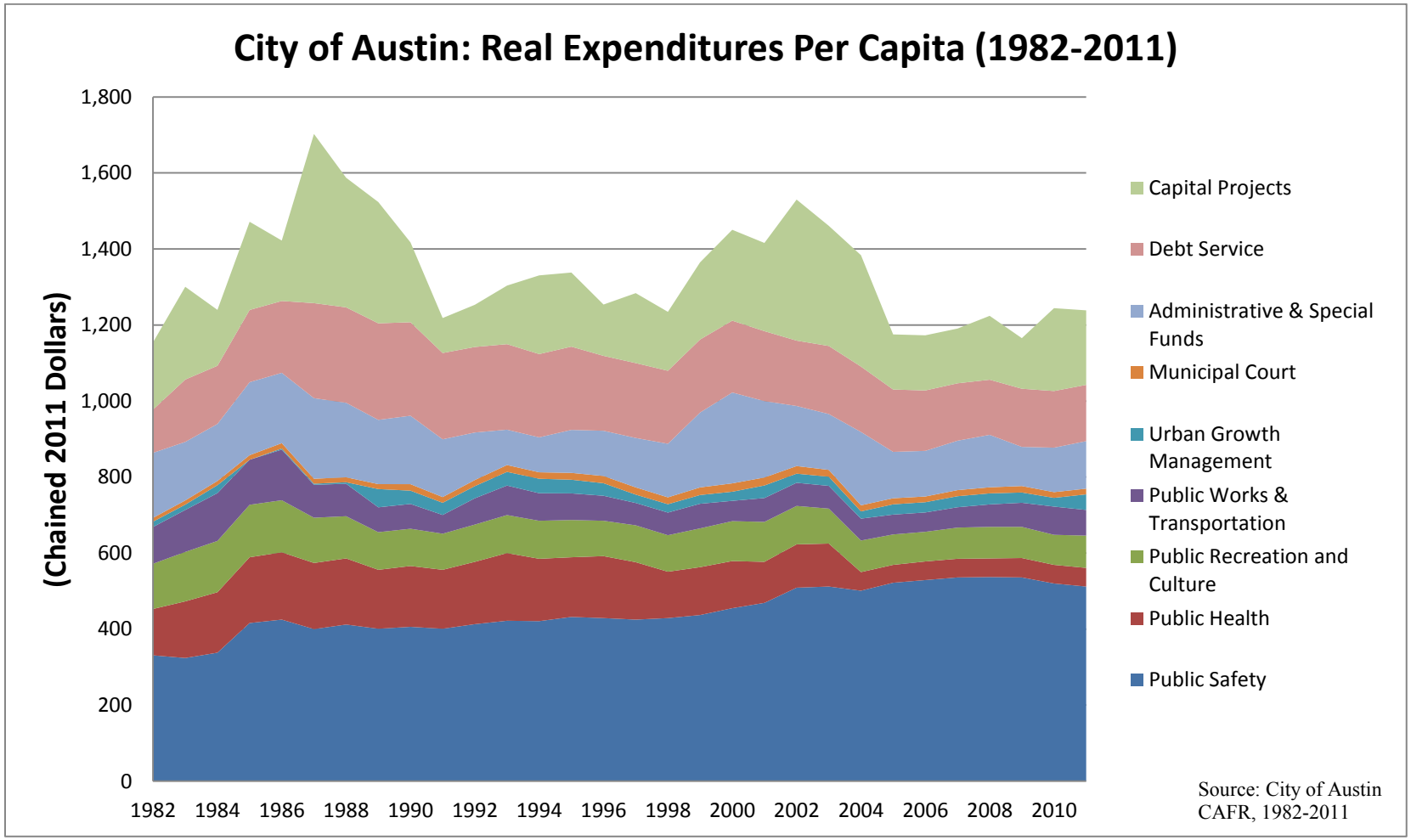
Figure 4.5: Real Property Taxes Per Capita, 1982-2011



EXPENDITURES AND PERFORMANCE/CITIZEN SURVEY DATA

The remainder of this chapter will focus on the connection between City of Austin expenditures, department performance measures, and citizen satisfaction with city services. Expenditure data used in the analysis for this report are organized into broad categories based on governmental function to ensure consistency, as departmental funding has varied over time: Public Safety, Public Health, Public Recreation and Culture, Public Works and Transportation, Urban Growth Management, Administrative and Special Funds, Debt Service, and Capital Projects. Each revenue category addressed in the previous section is tied in one way or another to the expenditure categories in this section. Figure 4.6 shows the 30-year history of real expenditures per capita for these categories.

Figure 4.6: City of Austin: Real Expenditures Per Capita (1982-2011)



Public Safety

From 1982 to 2011, General Fund expenditures for Public Safety increased from $45.9 million to $420.2 million. Adjusting for inflation and population growth, expenditures increased 55 percent, from $331 to $512 per capita. Public Safety spending as a percentage of total expenditures has increased steadily from 29 percent in 1982 to 41 percent in 2011, the largest increase of any other expenditure category. Figure 4.7 provides detail on expenditures by each Public Safety department (Police, Fire, EMS, and Emergency Management) and Figure 4.8 provides a comparison of Police staffing levels to other major city departments. Incidentally, the number of sworn police officers has increased substantially more than any other city department, including other public safety entities and recreation and culture departments, in spite of changes in economic conditions or political leadership (see Figure 4.8).

Real police department expenditures per capita increased 60 percent, (compared to a 7 percent increase in overall city expenditures), and the number of department employees increased 178 percent (compared to a 123 percent increase in city population over the same time period). Real fire department expenditures per capita increased 31 percent and the number of department employees increased 122 percent. Finally, real EMS department expenditures per capita increased 115 percent, from $27 million to $58 million, and the number of department employees increased 324 percent from 120 to 507.[110]

[110] EMS services are a joint venture between the City of Austin and Travis County. These figures represent the City of Austin's portion, which were approximately 75 percent of the total EMS budget for FY 2011. The large percentage increases in expenditures and number of employees

Figure 4.7: Real Public Safety Expenditures Per Capita (1982-2011)

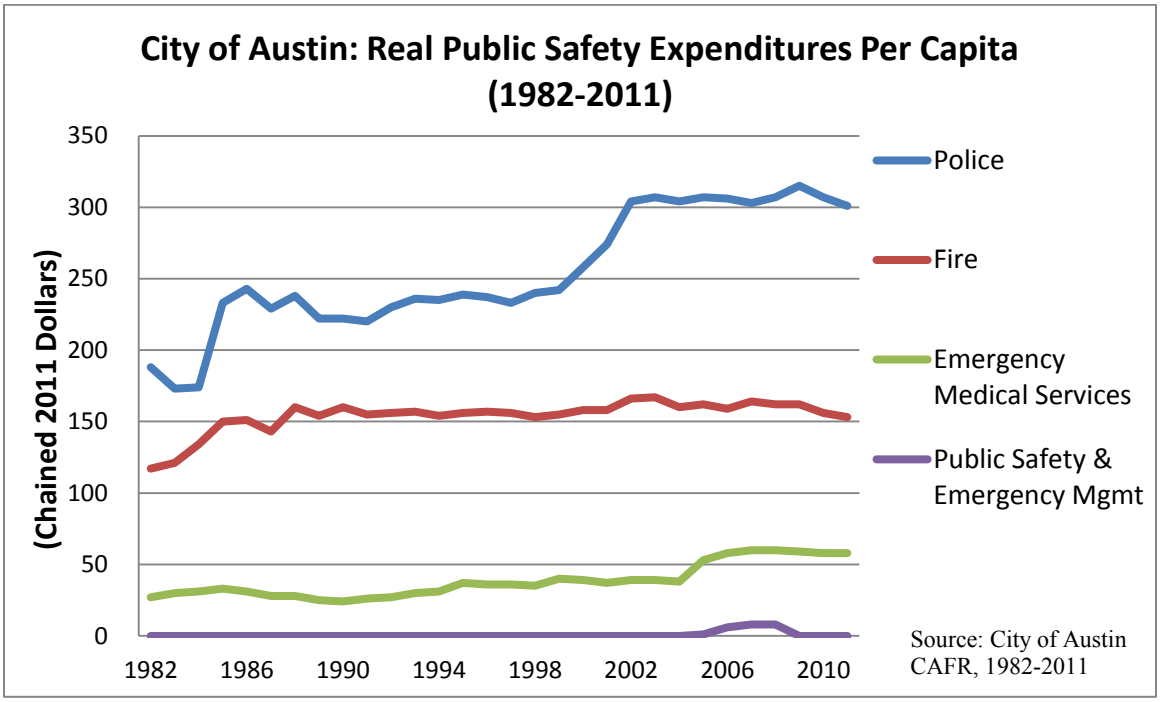
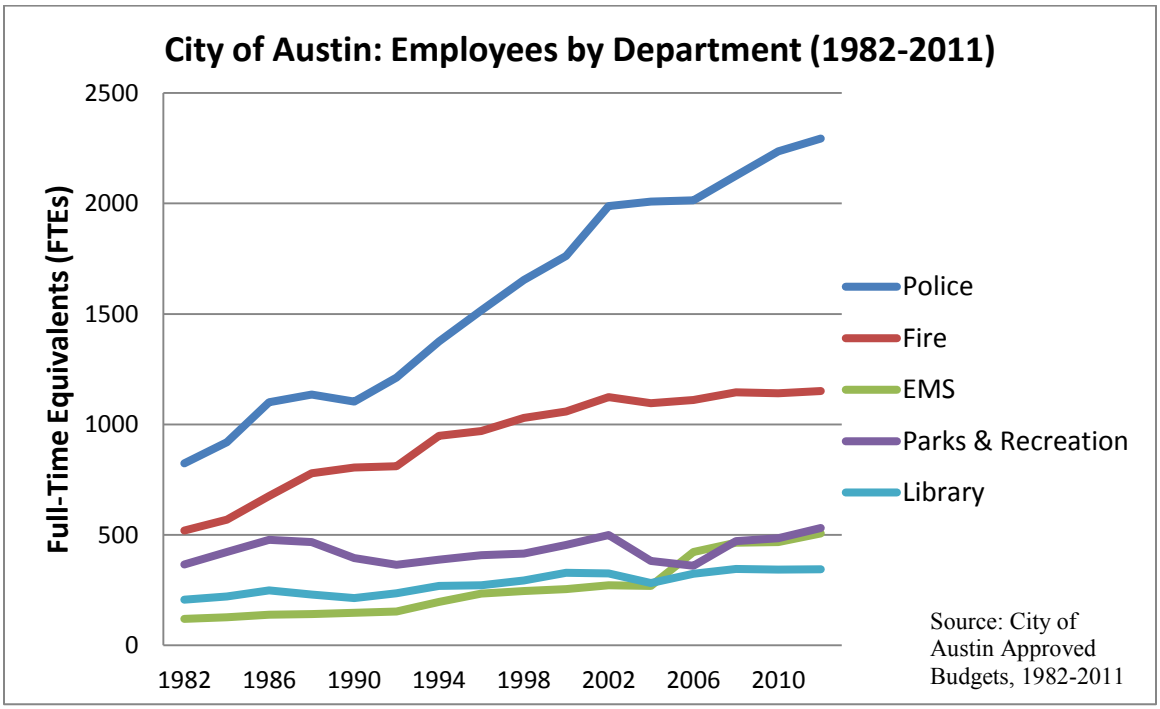
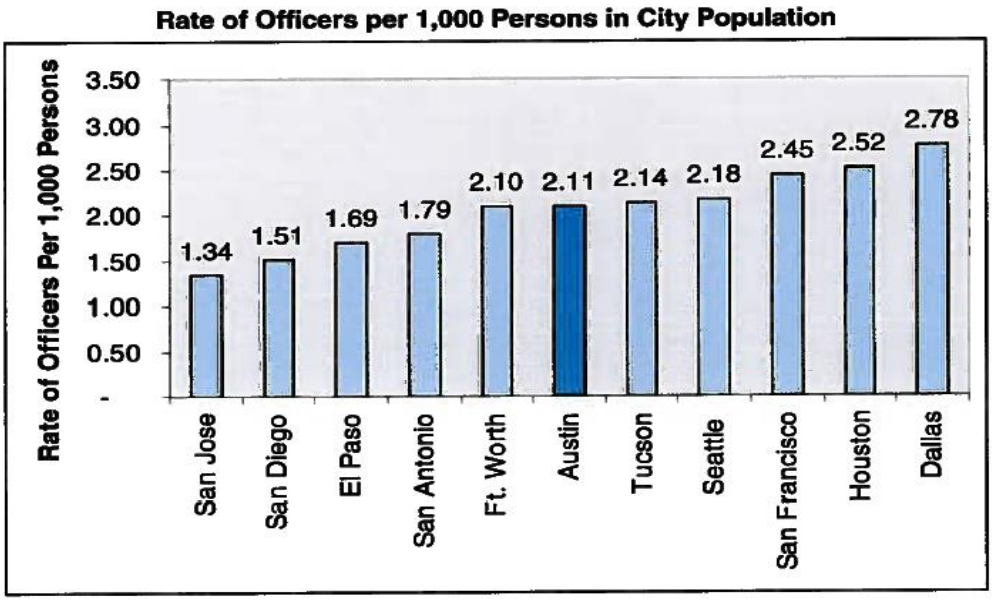


Figure 4.8: Employees by Department (1982-2011)



As Figure 4.7 and Figure 4.8 demonstrate, the large increase in public safety expenditures since 1982 is mostly attributable to the expenditures and staffing devoted to the police department. Unlike all other City departments, the police department staffing levels are determined by a formula based on population size: 2.0 sworn officers per 1,000 persons. Thus, as a result of rapid population growth, the number of sworn police officers has followed suit. Figure 4.9 provides a comparison of police staffing ratios among peer cities, indicating Austin's ratio of police officers per 1,000 persons falls in the middle of the distribution. Interestingly, of the comparison cities in this chart, only Dallas has an ordinance and department goal to maintain a specific ratio of sworn officers per persons (3.0); the other cities use a combination of population size, crime data and trends, performance metrics, and community priorities to determine the appropriate level of police staffing.

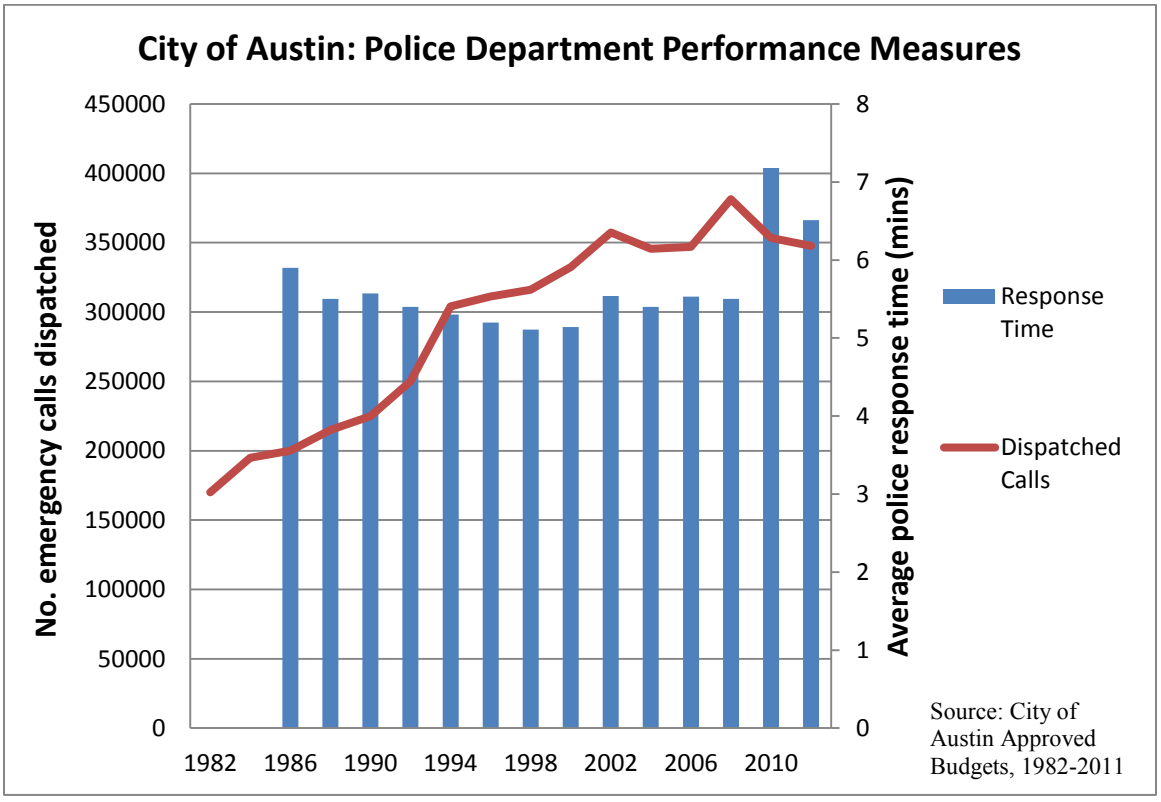
Figure 4.9: Rate of Officers per 1,000 Persons in City Population (2011)[111]



[111] Kenneth J. Mory, "Sworn Police Officer Staffing Levels of Peer Cities Compared to Austin" (City of Austin: Office of the City Auditor, September 9, 2011), http://www.austintexas.gov/sites/default/files/files/Auditor/as11106.pdf.

While the overall number of police officers is determined using a rule-of-thumb, some staffing needs within the police department are adjusted using performance metrics to determine the allocation of resources to areas with the greatest demand. According to the Austin Police Department Patrol Utilization Study published in July 2012, in the past 5 years the police department has determined the appropriate level of patrol staffing by taking into account response times to high priority calls, the number of high priority calls, and the number of lower priority calls.[112] Incidentally, the department has collected performance data on these metrics since the early 1980s (see Figure 4.10).

Figure 4.10: Police Department Performance Measures



[112] Police Executive Research Forum, "Austin Police Department Patrol Utilization Study," July 2012, http://www.austintexas.gov/sites/default/files/files/Police/PERF_Final_Report_-_Austin.pdf.

The City of Austin's "two-per-thousand" ratio for assessing police department staffing needs provides a convenient, dependable increase in police staffing as the population grows, but in recent years some City Council members have suggested the city move towards a more objective assessment of overall police staffing needs. Consequently, the city asked the Police Executive Research Forum (PERF) to provide a comprehensive report that included an assessment of the current demand for sworn law enforcement, comparisons of staffing levels to other U.S. cities, information on community expectations for public safety, and recommendations for alternative methods for determining police staffing levels.[113] The primary recommendation was to take a more analytical approach to determine staffing needs within each unit of the department (e.g. crime data, external and internal workload demand, supervisor observation/evaluation), and aligning the ratio of sworn to civilian personnel based on the services demanded by the community in the survey conducted.

Not surprisingly, the most important performance measures used by the police department (number of high-priority calls and average response time) are also used by the fire and EMS departments. Figure 4.11, Figure 4.12, and Figure 4.13 show the available performance data for these departments over time. The performance data indicate that, despite the pressures of population growth on demand for fire and EMS services, the response time for emergency incidents has not increased at an unreasonable rate. Likewise, citizen satisfaction with fire and EMS services has remained consistency high throughout the past 20 years (see Figure 4.14).

[113] Ibid.

Figure 4.11: Fire Department Performance Measures (1 of 2)

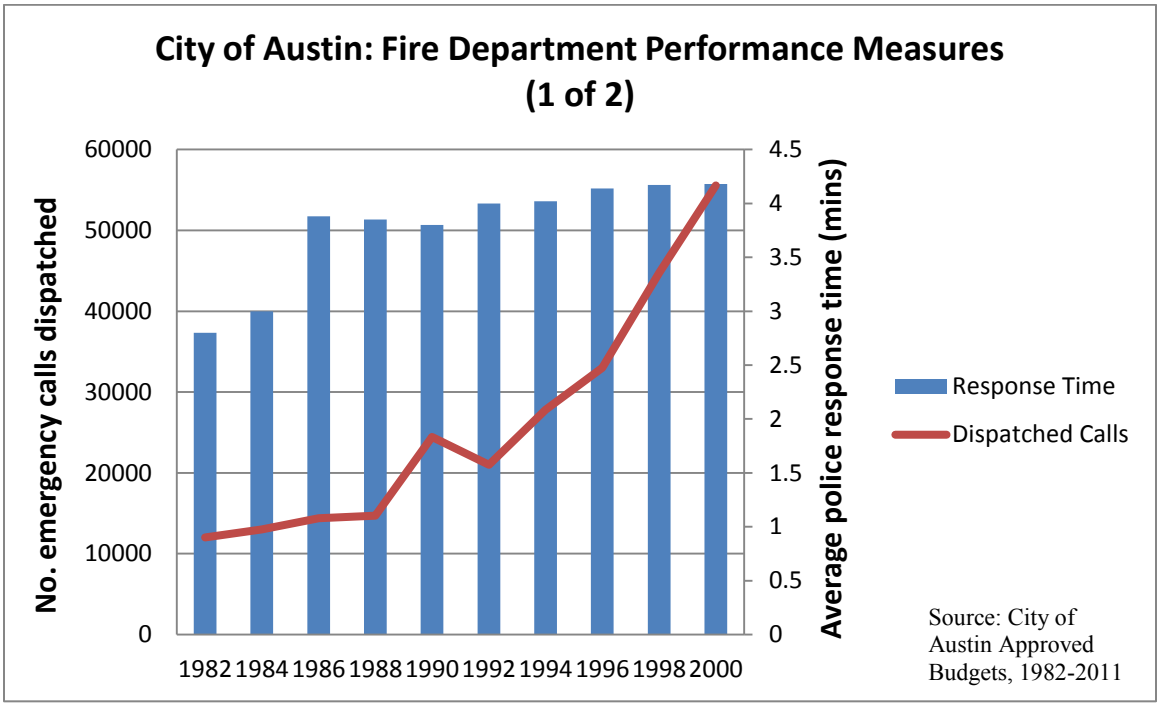


Figure 4.12: Fire Department Performance Measures (2 of 2)

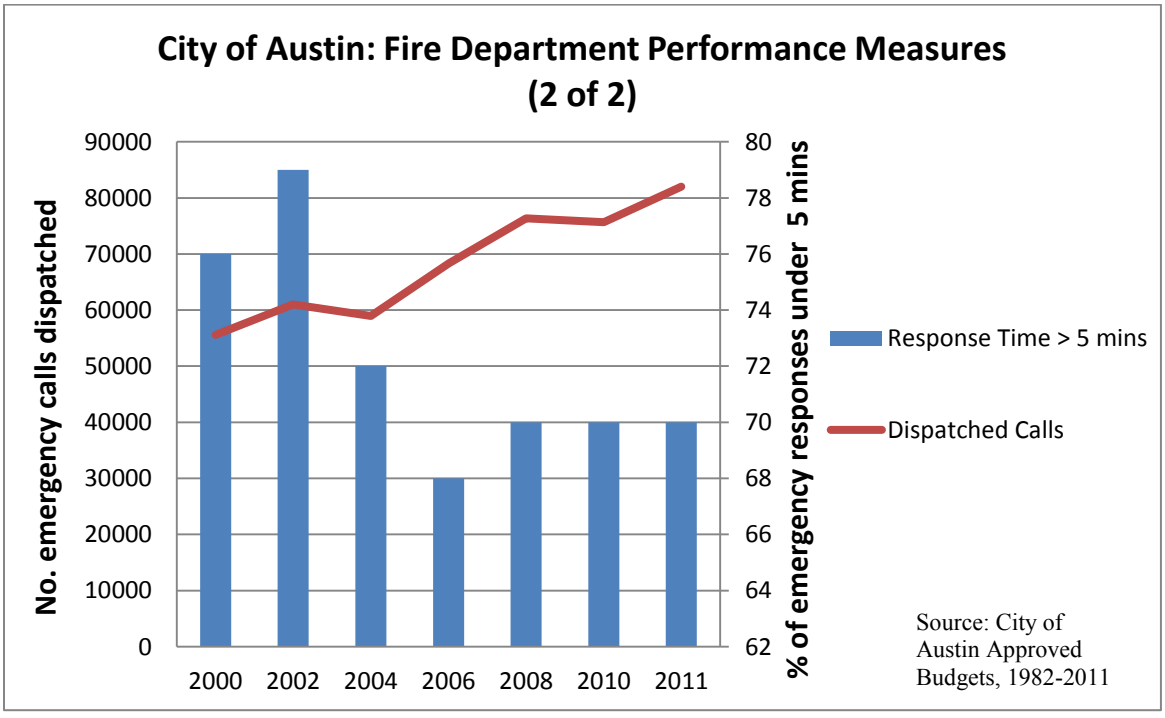


Figure 4.13: EMS Department Performance Measures

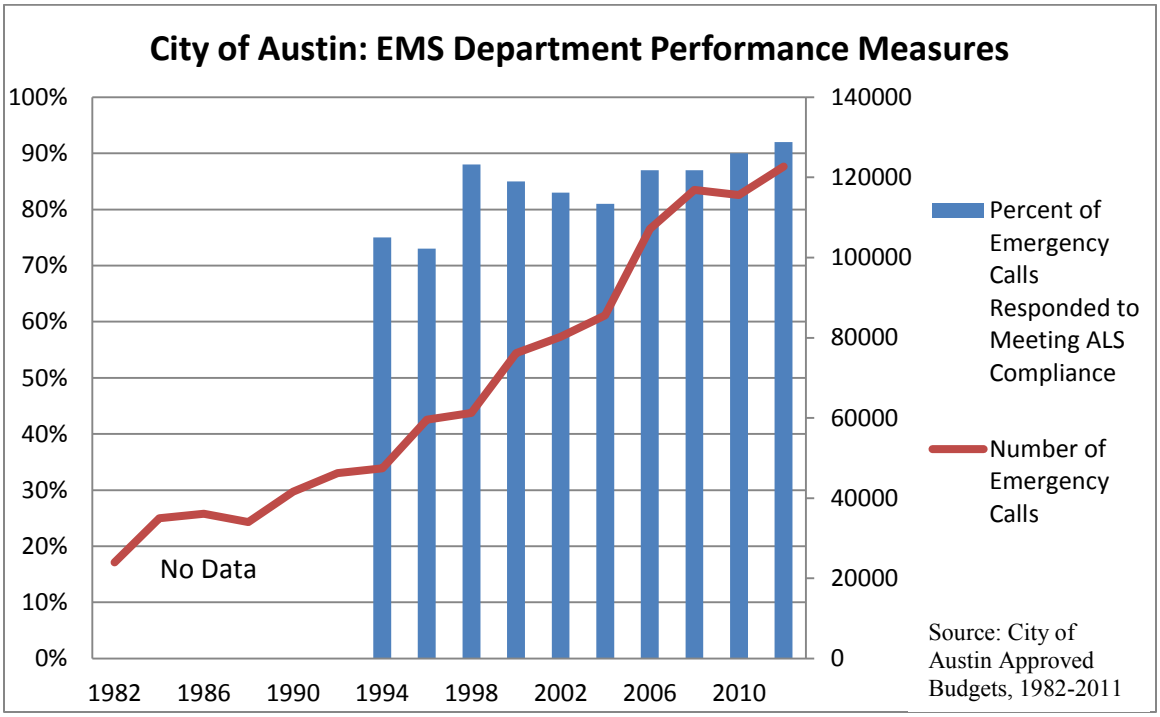
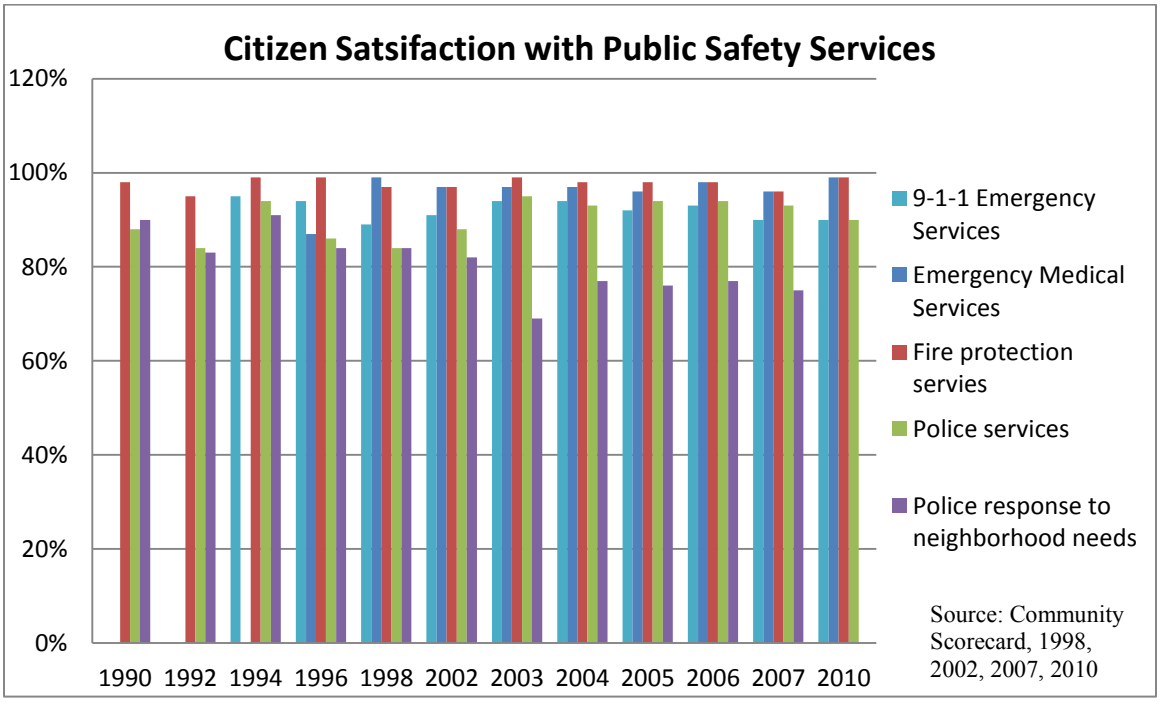


Figure 4.14: Citizen Satisfaction with Public Safety Services



Public Health

General Fund expenditures for Public Health increased from $17.0 million to $40.1 million, though after adjusting for inflation and population growth, expenditures actually decreased 60 percent, from $122 to $49 per capita. Public Health spending as a percentage of total expenditures increased from 11 percent in 1982 to a peak of 14 percent in 1993, before decreasing to less than 4 percent by 2011. The primary explanation for the decrease in Public Health expenditures over this time period is the gradual transition of financing and administration of indigent healthcare to Central Health, the entity created by voter approval in 2004 to coordinate and finance a variety of health care functions previously dispersed among multiple City of Austin and Travis County departments.[114] Prior to the creation of Central Health, the City of Austin had already begun the gradual transition of financial and administrative responsibility for public healthcare to other entities. For example, in 1995, after several decades of financial turmoil, the City of Austin contracted the operating responsibilities for Texas's oldest public hospital, Brackenridge Hospital, to Seton Healthcare, a private hospital organization, and eventually transferred ownership of the hospital to Central Health in 2004.

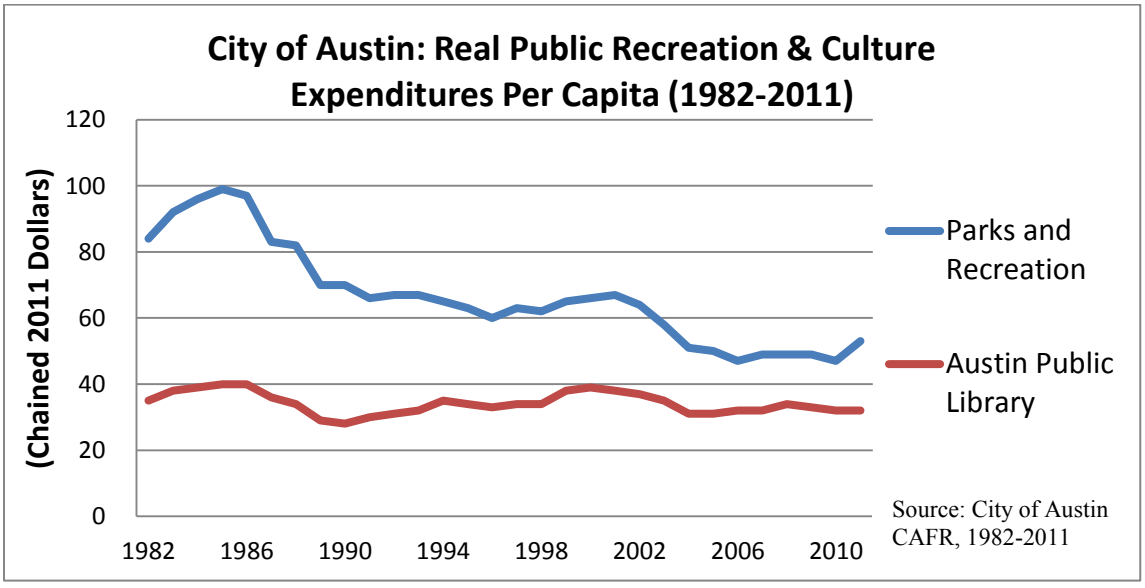
Public Recreation and Culture

The Public Recreation and Culture category includes General Fund expenditures for Austin Parks and Recreation and the Austin Public Library departments. Tax-supported expenditures increased from $16.5 million in 1982 to $69.8 million in 2011. Adjusting for inflation and population growth, expenditures actually decreased 37 percent, from $119 to $85 per capita, and decreased from 10 percent to 7 percent of

[114] For details on Central Health see Central Health, "About Us," accessed April 1, 2013, http://www.traviscountyhd.org/about_us.html.

overall spending. Figure 4.15 provides detail on expenditures by the Parks and Recreation and Library departments over this time period. Real parks and recreation spending per capita decreased from $84 to $53, while real public library spending per capita decreased from $35 to $32. The decrease in expenditures for Public Recreation and Culture does not take into account capital funding from voter-approved bond elections, which have added several hundred million dollars in improvements to parks and cultural facilities since 1982. Nor does the decrease in tax-supported expenditures reflect a lack of public support for these departments and their functions. In fact, the Austin Parks and Recreation Department has one of the nation's highest customer satisfaction ratings and the Austin Public Library received the highest customer satisfaction of any other City of Austin department in 2011 (see Figure 4.17).[115]

Figure 4.15: City of Austin: Real Public Recreation and Culture Expenditures Per Capita (1982-2011)



[115] Austin Parks & Recreation, "Marketing Plan FY 2011-2012," October 2012, http://www.austintexas.gov/sites/default/files/files/Parks/Media/marketingplan2012.pdf; ETC Institute, "2011 City of Austin Community Survey."

Figure 4.16: Library Department Performance Measures

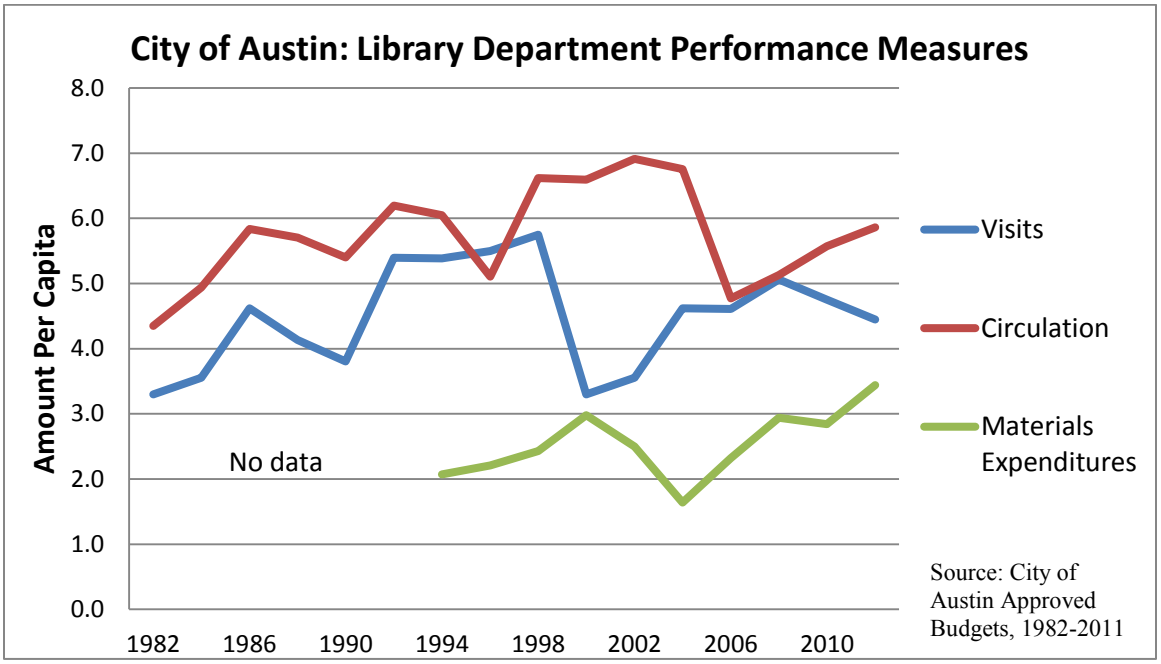
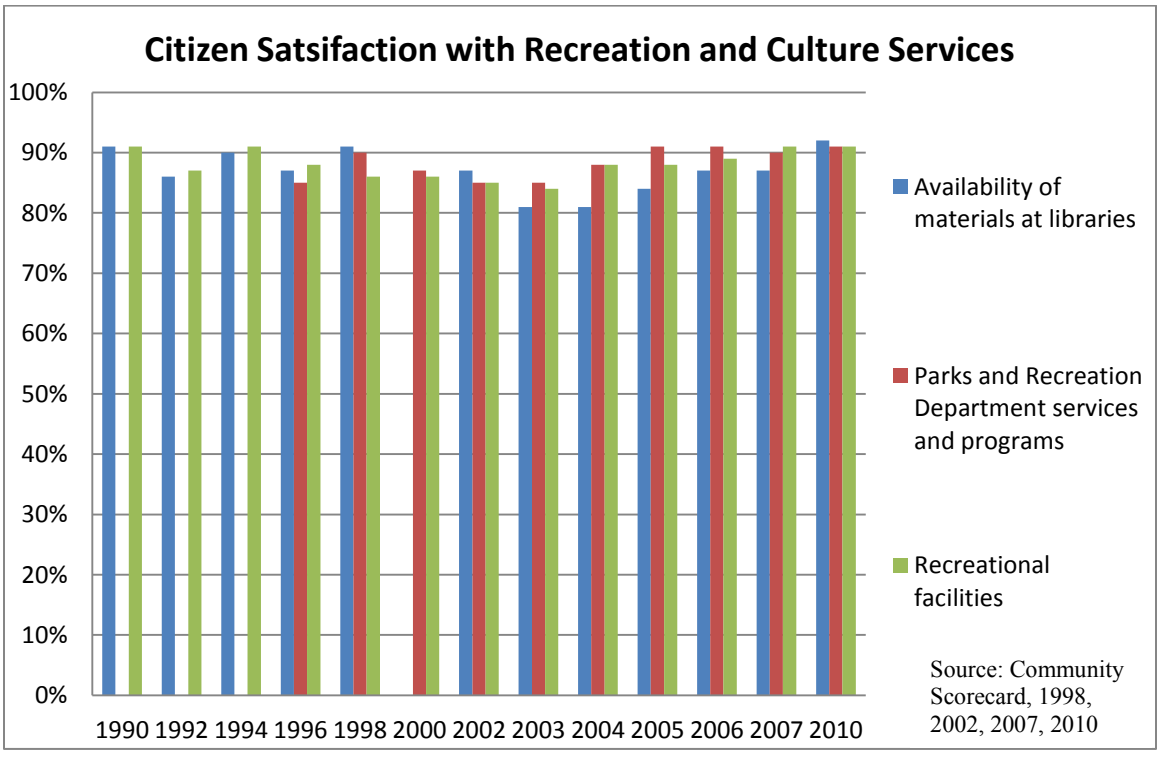


Figure 4.17: Citizen Satisfaction with Recreation & Culture Services



Public Works and Transportation & Urban Growth Management

The Public Works and Transportation functions for the City of Austin have undergone several organizational and funding changes since 1982. Prior to 1992, expenditures were allocated primarily from the General Fund, parking revenue, grants, and General Obligation Bonds. Since 1992, the Transportation User Fee has replaced the majority of General Fund revenue, though the Transportation Department received General Fund revenue from 2001 to 2010.

Public Works and Transportation expenditures from General Fund and Transportation User Fee revenue increased from $13.4 million in 1982 to $55.4 million in 2011. Adjusting for inflation and population growth, expenditures actually decreased 31 percent, from $97 to $67 per capita, and decreased from 8 percent to 5 percent of overall spending. The decrease in per capita expenditures for Public Works and Transportation does not take into account capital funding and grants from federal and state entities, which account for the majority of spending each year in this category for roads, sidewalks, signals, and bike lanes.[116]

The Urban Growth Management category includes activities related to neighborhood planning, development services, zoning, and permitting. Tax-supported expenditures increased from $1.9 million in 1982 to $33.7 million in 2011. Adjusting for inflation and population growth, expenditures increased 193 percent, from $14 to $41 per capita, and increased from 1 percent to 3 percent of overall spending. The large increase in expenditures for urban growth management reflects the shifting of funding for these activities from strictly developer fees to a combination of developer fees and tax-supported expenditures from the General Fund.

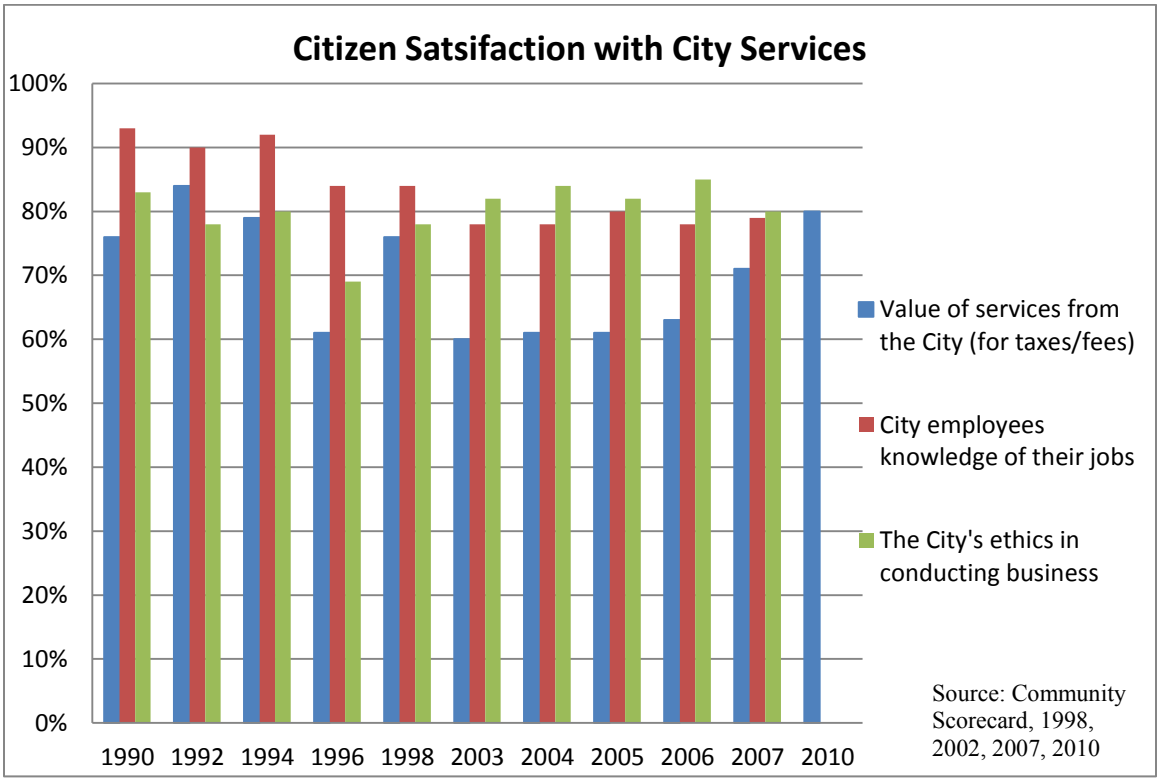
[116] For example, capital funding for FY2011 was the decrease in per capita expenditures is also explained by the transfer of responsibility for public transit from the City of Austin to Capital Metro in 1985 after voters approved the creation of a transit agency financed with a 1 percent sales tax levy.

Administrative and Special Funds

The Administrative and Special Funds category includes all funding transfers from the General Fund to funds that support internal city services (finance, administration, contract management, communications and technology management, vehicle maintenance, workers compensation, employee benefits, etc.) and funds that support specific public purposes established by the City Council (child safety, cultural arts, affordable housing, economic incentives, environmental preservation, etc.). Tax-supported expenditures increased from $23.7 million in 1982 to $102.6 million in 2011. Adjusting for inflation and population growth, expenditures decreased 27 percent, from $171 to $125 per capita, and decreased from 15 percent to 10 percent of overall spending.

To the City's credit, the relative decrease in overall city expenditures for administrative and special purposes has not resulted in a similar decrease in customer satisfaction with city services (see Figure 4.18). In fact, despite gradually rising property taxes for Austin residents since the early 1990s, the percentage of citizens satisfied with the value of city services given the amount of taxes and fees paid has been steadily increasing over the same time period. Likewise, the perception of city employees conducting business in an ethical and professional manner remains consistently high.

Figure 4.18: Citizen Satisfaction with City Services



Capital Projects

The Capital Projects category includes resources used for the acquisition or construction of major capital facilities other than those financed by proprietary funds and trust funds. Local governments utilize capital improvement programs to guide investments in public facilities and infrastructure that have a long useful life, such as roads, bridges, parks, libraries, and large-scale technology improvements. Unlike the annual operating budget used to pay for day-to-day expenditures like salaries and benefits, the capital budget includes expenditures that encompass a multi-year period, with a useful life of at least 3-5 years. Capital project expenditures increased from $24.5 million in 1982 to as high as $174.2 million in 2002, and were $160.7 million in 2011. Adjusting for inflation and population growth over this time period, per capita capital

project expenditures increased 99 percent from 1982 to 1988 and decreased 44 percent from 1988 to 2011, an overall 30 year increase of 11 percent.

Over this time period, the percentage of overall spending for Capital Projects varied more than other expenditure categories, from as low as 15 to as high as 26 percent. Figure 4.19 captures the peaks in real Capital Projects expenditures per capita in 1987 (the result of bond referenda in 1982, 1983, 1984, and 1985) and 2002 (the result of large bond referenda in 1998 and 2000).[117] Prior to 2010, the responsibilities for planning, development, and oversight of capital projects was spread across several city departments, and as a result, the recent creation of the Capital Planning Office has facilitated coordination of capital improvement plan funding, project monitoring, and general obligation bond development and oversight.

Debt Service

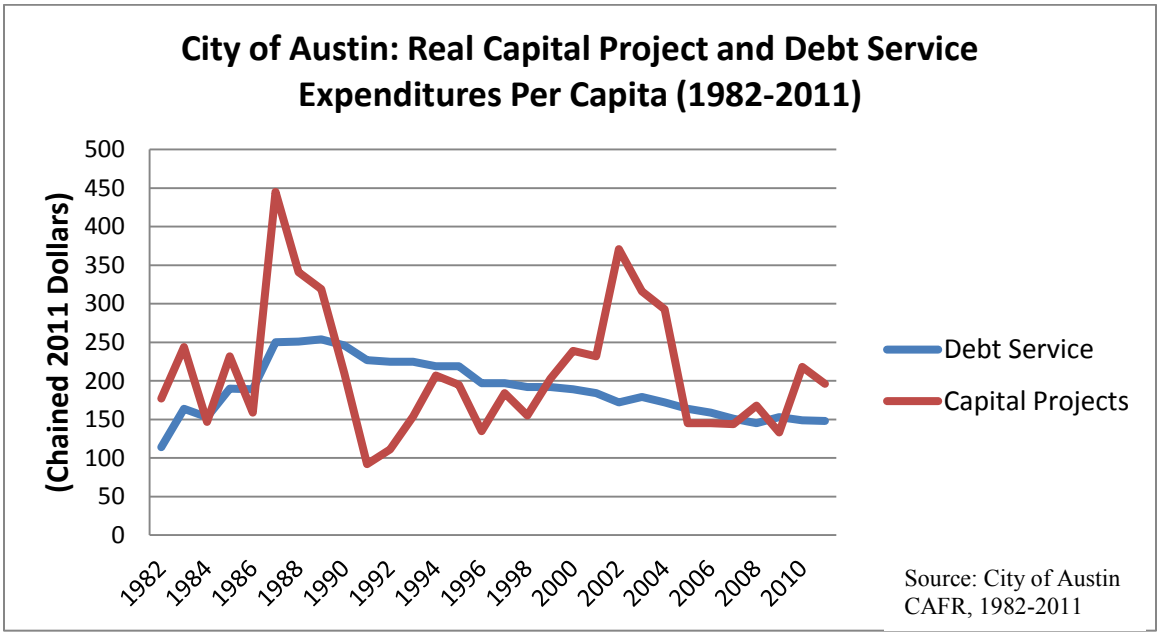
The Debt Service category includes payments of principal, interest and related costs of general obligation or tax-supported debt. Local governments typically finance capital projects with a combination of cash and debt, similar to a household financing a home purchase with a down payment and a mortgage. For most local governments, paying for both operating and capital expenditures with cash alone would require large tax increases in the years with numerous capital projects initiated, followed by large tax reductions in years with fewer capital projects initiated. By issuing long-term debt (typically for a 20-year period), local governments are able to smooth expenditure patterns, closely align the payments with the useful life of the project, and spread the cost among current and future residents who benefit from these projects.

---

[117] For a complete history of all City of Austin elections from 1840 to the present, see City of Austin, Office of the City Clerk, "Election History," accessed April 20, 2013, http://www.ci.austin.tx.us/election/search.cfm.

City of Austin tax-supported expenditures increased from $15.9 million in 1982 to $121.3 million in 2011, and increased from 10 percent to 12 percent of overall spending. Adjusting for inflation and population growth over this time period, per capita debt service expenditures increased 127 percent from 1982 to 1988 and decreased 43 percent from 1988 to 2011, an overall 30 year increase of 30 percent. Figure 4.19 also shows the gradual decline in per capita debt service expenditures after the peak in 1989, likely the result of lower borrowing costs made possible by declining interest rates overt time.

Figure 4.19: Real Capital Project and Debt Service Expenditures Per Capita (1982-2011)



SUMMARY

This chapter presented an analysis of revenues, expenditures, performance data, and citizen satisfaction ratings for the City of Austin by compiling audited financial data, departmental performance measures, and citizen survey results over a 30 year period. Tables 4.2 and 4.3 provide a summary of changes in real revenues and expenditures per capita from 1982 to 2011.

Table 4.2: Summary of Changes in Real Revenue Per Capita

Revenue	1982	1988	2011	% Δ 1982-1988	% Δ 1988-2011	% Δ Overall
Property Taxes (General Fund)	$177	$254	$307	44%	21%	73%
Property Taxes (Debt Service)	$91	$197	$124	116%	-37%	36%
Total Property Taxes	***$268***	***$451***	***$431***	***68%***	***-4%***	***61%***
Sales Taxes	$144	$172	$184	19%	7%	28%
Other Taxes	$6	$5	$8	-17%	60%	33%
Transportation User Fee	$0	$0	$69	-	-	-
Total Household Taxes/Fees	***$418***	***$628***	***$692***	***50%***	***10%***	***66%***
Franchise Fees	$32	$34	$40	6%	18%	25%
Fines, forfeitures & penalties	$21	$35	$22	67%	-37%	5%
Licenses, permits & inspections	$7	$10	$23	43%	130%	229%
Charges for services/goods	$30	$45	$54	50%	20%	80%
Interest & other	$43	$13	$14	-70%	8%	-67%
Transfers In	$271	$316	$196	17%	-38%	-28%
Capital Projects	$26	$175	$18	573%	-90%	-31%
Total Revenue	***$848***	***$1,256***	***$1,059***	***48%***	***-16%***	***25%***

Table 4.3: Summary of Changes in Real Expenditures Per Capita

Expenditures	1982	1988	2011	% Δ 1982-1988	% Δ 1988-2011	% Δ Overall
Police	$188	$238	$301	27%	26%	60%
Fire	$117	$160	$153	37%	-4%	31%
Emergency Medical Services	$27	$28	$58	4%	107%	115%
Total Public Safety	***$332***	***$426***	***$512***	***28%***	***20%***	***54%***
Public Health	$122	$180	$49	48%	-73%	-60%
Parks and Recreation	$84	$82	$53	-2%	-35%	-37%
Austin Public Library	$35	$34	$32	-3%	-6%	-9%
Total Recreation & Culture	***$119***	***$116***	***$85***	***-3%***	***-27%***	***-29%***
Public Works & Transportation	$97	$85	$67	-12%	-21%	-31%
Urban Growth Management	$14	$4	$41	-71%	925%	193%
Municipal Court	$10	$13	$15	30%	15%	50%
Administrative & Special Funds	$171	$203	$125	19%	-38%	-27%
Debt Service	$114	$259	$148	127%	-43%	30%
Capital Projects	$177	$353	$196	99%	-44%	11%
Total Expenditures	***$1,607***	***$2,181***	***$1,835***	***42%***	***-24%***	***7%***

The analysis of the long term financial data shows a substantial increase in per capita revenues and expenditures between 1982 and 1988, followed by stagnant or declining amounts throughout the 1990s, and finally, a gradual increase in these figures from the 2000 to 2011. Incidentally, the upward trend in per capita revenues and expenditures follows closely the sharp increases in population and land area within the City of Austin. While more advanced statistical analysis would be needed to determine the elasticity of local government expenditures with respect to population growth, the analysis in this report shows the effect of growth is positively correlated with the cost of local government measured in per capita expenditures.

In the context of Austin, the cost increases within other local government entities have been more pronounced. The growth in population outside of Austin (within Travis County) has been faster than the growth within the city limits, and likewise, the increase in tax revenue and per capita expenditures has been greater for Travis County than for the City of Austin. Moreover, the property tax revenue for the Austin Independent School District has increased more than any other local government entity in Travis County, likely in response to declining state funding for public education in recent years and the provision of the Texas public school finance system known as "recapture." "Recapture" requires a portion of revenue from property-wealthy school districts (such as AISD) to be redistributed to poor school districts, to ensure more equitable funding per student across the state.[118] Incidentally, AISD is the single largest payer of recapture payments among school districts in Texas and has paid the state more than $1.5 billion in recapture payments since 2002.[119]

---

[118] Texas Education Agency, "Chapter 41 Wealth Equalization," April 2013, http://www.tea.state.tx.us/index2.aspx?id=6796.

[119] Austin Independent School District, "School Funding," accessed April 26, 2013, http://www.austinisd.org/legislature/school-funding.

Within the City of Austin, the portfolio of revenue sources has shifted from a reliance on transfers from the public utilities to a more balanced allocation of taxes, fees, charges for services, and utility transfers. Property taxes have gradually risen with home values throughout the past 30 years, though the portion devoted to debt service has declined since 1988. Likewise, the trend in sales tax and miscellaneous revenue has closely matched that of the local economy, with sharp declines during recessions, though over the long run these revenue sources have generally trended upward as the city grows in size and prominence.

The trend in expenditures from 1982 to 1988 was primarily driven by the large percentages of overall spending on capital project spending and debt service. Since 1988, several trends have occurred, including the shifting of public health responsibilities from the City of Austin to the health district, the gradual decline in operational expenditures for public recreation and culture, and the larger share of tax-supported expenditures for public safety, most notably for police. From a city management perspective, the allocation of expenditures for a particular department should be based on an objective assessment of staffing needs; hence the formulaic method used by the City of Austin to determine the appropriate number of police officers raises several concerns. The primary consequence of this method is the gradual shifting of city funding priorities away from other services in favor of police services, regardless of the needs of the community at any given point in time. Furthermore, the budgeting and policy decision-making process lose integrity when a large percentage of spending is automatically insulated from the vetting process necessary to weigh limited resources with community needs and department performance goals.

Nonetheless, there have been general improvements in performance measure outcomes for the departments analyzed and the level of citizen satisfaction with city

services remained consistently high over time. The persistence of high citizen satisfaction despite increasing property taxes might initially seem counterintuitive, given the general aversion to paying taxes. However, the literature on citizen engagement shows that when local governments demonstrate a commitment to community well-being and transparency, citizens' attitudes towards government and its services improve. Moreover, positive attitudes towards local government and its services correspond to a willingness to support higher levels of public expenditures and taxation.[120] These findings suggest that, despite rapid population growth and an increase in the cost of government, the City of Austin has demonstrated a commitment to improving the lives of those in the community, and in response citizens have generally supported increased taxes to finance additional expenditures and services.

[120] Simonsen and Robbins, "Reasonableness, Satisfaction, and Willingness to Pay Property Taxes."

Chapter 5: Conclusion

The fundamental challenge for the City of Austin as the population grows will be to maintain the high quality of life enjoyed by its residents, which will require the delivery of quality public services at minimal cost. While citizen satisfaction and support for local government services remains high for the City of Austin, there are always opportunities to improve. The City will most certainly face demographic, political, and economic changes as the Central Texas region surrounding Austin grows, and members of the public will insist on accountability from future city managers and political leaders to pursue policies that are productive and cost-effective.

RECOMMENDATIONS

1) *Conduct an audit of the performance measurement system.*

   The City of Austin has undergone several audits of its performance measurement and business process systems in the past twenty years, and through the efforts of city management and staff, eventually formalized a business planning process in 1999 to link the allocation of financial resources to departmental goals and performance.[121] After nearly 15 years of full implementation, the City Auditor's Office should conduct an audit to ensure that the current performance measures are adequate and relevant, given the challenges addressed in previous chapters (demographic changes, growth management, annexation, transportation, and affordability). Furthermore, the audit should reveal if department staff find the business planning process valuable and if the city's performance measures are effectively incorporated into the collective decision-making process for annual budget and resource allocation.

[121] For details on the City of Austin's business planning process, Managing for Results, see City of Austin, "Managing for Results Business Planning Guide," Revised 2003, http://www.ci.austin.tx.us/budget/03-04/downloads/bpresourceguide2003.pdf.

2) *Consider alternative financing systems as a way to mitigate future cost increases*

As discussed earlier, evidence on the fiscal benefits of alternative delivery systems such as privatization and public-private partnerships is mixed. Researchers evaluating alternative service delivery found that local governments often lacked the resources or expertise to effectively manage or monitor the complex contracts involved in privatization or public-private partnerships. Others found that competition rarely exists in local government service delivery markets to reduce cost or improve quality.

Despite the potential shortcomings of privatization, the City of Austin is currently pursuing several alternative financing models that show promise for mitigating future cost increases as the population grows. One example is establishing tax-increment financing (TIF) districts to facilitate redevelopment in underutilized parts of the city. TIF districts create a dedicated source of revenue for improvement projects based on the corresponding increase in property values or sales tax collections in that district once redevelopment occurs. This approach, if administered correctly, allows local governments to achieve the benefits of redevelopment without depleting current general fund revenues or raising taxes on existing residents.

Another example of alternative financing for expanded services is the addition of dedicated mass transit and toll lanes to Loop 1 (the major north-south corridor) to relieve traffic congestion. This approach is controversial to those who think roads built with public funding should be free, but the use of tolls on an existing highway is more cost-effective and less controversial than purchasing additional right-of-way for new lanes or expanding the highway further into existing neighborhoods.

These two examples highlight the potential benefits of alternative financing of public goods, and there could be other opportunities for such a strategy within the

City of Austin. The City should investigate these opportunities and give mangers, political leaders, and the public the option to weigh the costs and benefits of an alternative approach to financing services that address the challenges Austin faces.

3) *Improve coordination between disparate taxing entities*.

A recent article in the Austin American-Statesman estimated that the collective needs of the five main Travis County taxing jurisdictions (City of Austin, Travis County, AISD, Central Health, and Austin Community College) could add approximately $1,000 in the next 5 years to the average owners' property tax bill.[122] Although these estimates do not take into account inflation or population growth, the potential increases in taxes required underscores the need for a comprehensive assessment of the community's needs and a prioritization of new investments based on the community's willingness to finance these projects through higher taxes.

4) *Pursue creative citizen engagement efforts to improve public awareness of city expenditures*.

Citizen engagement efforts are important for the City of Austin to maintain high levels of public support. The opportunities for citizen engagement in neighborhood planning, public space improvements, and policy commissions exists already, but efforts to include citizen input in the allocation of city resources has been lacking. In response, the Budget Office and other departments are pursuing ways to improve transparency in the budgeting process and allow citizens to voice preferences for the allocation of tax dollars. One example is the "Budget in a Box" project, which allows citizen focus groups the opportunity to suggest increases or decreases to particular

[122] Laura Heinauer, Marty Toohey, and Mary Ann Roser, "Local Entities Join Forces to Sync Myriad Bond, Tax Proposals," *The Austin American-Statesman*, accessed April 26, 2013, http://www.statesman.com/news/news/local/local-entities-join-forces-to-sync-myriad-bond-t-1/nRp6H/.

city services through an engaging activity or online survey.[123] Furthermore, the City of Austin could replicate the efforts of private businesses and universities to encourage entrepreneurialism by establishing an "innovation challenge" aimed at improving service delivery or cost-effectiveness. The City could provide a financial incentive to reward the proposals that improve service delivery for everyone and lower the overall cost.

FUTURE RESEARCH

The importance of better understanding the challenges facing local government make this topic conducive for further research not addressed in this report. Extending the multi-decade analysis of financial data, performance measures, and citizen satisfaction to other U.S. cities would provide a more robust understanding of the effects of rapid growth in different political and economic contexts. Furthermore, conducting econometric analyses of the effects of growth on local government finances, service delivery, and citizen satisfaction would provide a useful complement to the qualitative analysis used in this report.[124] Another important issue not specifically addressed in this report is the effect of economic downturns on changes in local government finances, service delivery, and citizen satisfaction.

Finally, there are several opportunities for future research of local government in Austin. An analysis of the major events that occur in Austin each year, such as the Austin City Limits Music Festival, South by Southwest, and Formula 1, would be useful to determine to what extent the additional revenue and economic activity generated from outside visitors could potentially offset potential increases in property taxes and fees for

[123] City of Austin, Financial and Administrative Services Department, "Budget in a Box," accessed April 23, 2013, http://austintexas.gov/online-form/budget-box.
[124] For an example of this kind of work, see: Helen F Ladd, "Fiscal Impacts of Local Population Growth."

residents. Finally, in light of the recent change to single-member district representation for the Austin City Council, an evaluation of service delivery quality and citizen satisfaction within each district boundary would help city managers and political leaders allocate resources efficiently and equitably across all areas of the city.

Appendix A: City of Austin Revenues (1982-2011)

	Fiscal Year Ended September 30 (in thousands)														
REVENUES	**1982**	**1983**	**1984**	**1985**	**1986**	**1987**	**1988**	**1989**	**1990**	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**
Property Taxes (General Fund)	29,983	34,306	42,419	41,762	49,296	51,889	63,541	48,828	54,702	51,617	55,244	58,756	63,567	66,253	74,441
Property Taxes (Debt Service)	15,393	18,767	22,894	31,345	40,332	42,136	49,284	53,343	48,328	46,530	46,772	50,471	50,844	52,679	53,214
Sales Taxes	24,417	28,097	36,873	44,634	43,949	39,888	42,925	47,172	51,540	55,401	58,255	67,054	75,273	80,475	83,681
Other Taxes	988	1,108	1,232	1,630	1,494	1,380	1,303	1,329	1,374	2,485	1,797	1,827	2,014	2,161	2,282
Franchise Fees	5,483	6,596	6,520	7,121	6,858	9,727	8,493	7,781	7,973	8,640	10,847	11,139	11,983	12,183	13,338
Fines, forefeitures and penalties	3,560	4,350	5,256	6,065	7,368	8,064	8,654	7,057	8,124	7,140	7,470	9,501	9,764	10,966	12,159
Licenses, permits and inspections	1,109	1,448	1,924	1,814	2,433	2,391	2,444	6,226	5,935	6,486	7,892	10,307	12,851	13,074	14,311
Charges for services/goods	5,077	9,001	12,879	9,904	11,326	10,227	11,338	11,807	11,831	7,626	8,045	7,238	6,519	8,021	8,175
Interest and other	7,356	4,088	3,238	3,440	3,357	3,212	3,206	3,209	9,103	10,216	6,080	5,018	6,751	9,044	9,159
Transfers In	46,065	53,587	61,363	70,958	76,903	80,368	78,876	76,514	76,411	76,282	86,591	78,690	79,513	84,972	80,798
Capital Projects	4,395	6,425	5,505	5,613	12,778	28,412	43,697	43,075	25,832	10,862	10,467	11,269	10,486	15,353	11,263
Transportation User Fee (TUF)	0	0	0	0	0	0	0	0	0	0	1,772	6,892	6,913	7,813	9,778
Total Revenues	**143,828**	**143,828**	**143,828**	**143,828**	**143,828**	**143,828**	**143,828**	**143,828**	**143,828**	**143,828**	**143,828**	**143,828**	**143,828**	**143,828**	**143,828**

	Fiscal Year Ended September 30 (in thousands)														
REVENUES	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**
Property Taxes (General Fund)	80,529	90,775	106,233	115,328	124,931	143,056	150,378	160,049	136,927	150,450	168,293	187,975	210,618	236,302	251,852
Property Taxes (Debt Service)	55,149	57,639	61,111	64,961	71,741	72,782	82,195	83,321	83,767	84,105	83,178	89,698	96,988	101,842	101,648
Sales Taxes	88,150	97,581	106,839	122,157	123,218	115,441	110,454	117,725	123,617	139,289	153,098	154,445	139,795	144,710	151,125
Other Taxes	2,431	2,593	2,813	3,179	3,601	3,693	3,679	3,946	4,242	4,605	5,185	5,541	5,651	6,049	6,367
Franchise Fees	14,744	16,862	19,671	23,699	31,453	29,589	28,962	29,018	28,973	30,677	32,275	35,577	33,276	34,964	32,912
Fines, forefeitures and penalties	12,570	14,493	16,206	16,040	17,000	17,704	16,966	16,976	17,529	18,832	16,094	18,946	19,100	18,691	18,126
Licenses, permits and inspections	12,888	15,541	17,252	18,174	17,631	14,670	14,737	15,317	17,399	22,131	25,576	24,275	20,525	15,716	18,653
Charges for services/goods	9,427	10,261	11,534	11,758	13,725	14,315	14,202	14,380	23,064	24,453	26,323	29,163	33,748	33,310	44,457
Interest and other	8,257	17,397	9,013	21,371	13,686	23,229	20,615	24,285	18,706	24,607	25,738	18,029	16,673	14,654	11,827
Transfers In	79,924	82,322	86,850	94,144	112,223	94,015	94,385	98,679	105,249	127,651	114,159	127,992	128,966	137,681	161,199
Capital Projects	7,367	19,413	17,546	35,461	32,365	24,389	29,166	17,334	25,741	28,072	24,040	36,580	24,547	40,415	15,149
Transportation User Fee (TUF)	10,025	14,418	15,729	17,200	19,090	20,453	20,759	22,472	25,854	27,157	27,840	31,698	36,815	50,830	57,025
Total Revenues	**381,461**	**439,294**	**470,795**	**543,471**	**580,662**	**573,336**	**586,498**	**603,502**	**611,068**	**682,029**	**701,799**	**759,919**	**766,702**	**835,164**	**870,340**

Source: City of Austin Comprehensive Annual Financial Report (CAFR), 1982-2011

Appendix B: City of Austin Expenditures (1982-2011)

	Fiscal Year Ended September 30 (in thousands)														
EXPENDITURES	**1982**	**1983**	**1984**	**1985**	**1986**	**1987**	**1988**	**1989**	**1990**	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**
Municipal Court	1,323	1,628	1,834	2,146	2,608	2,570	2,652	2,782	3,865	3,758	4,159	4,712	5,012	5,415	6,267
Police	26,004	25,613	28,890	40,523	46,203	46,680	50,364	48,944	51,249	54,158	58,868	62,260	67,687	72,991	76,349
Fire	16,198	17,819	22,240	26,070	28,649	29,142	33,959	33,828	36,934	38,207	39,850	41,395	44,402	47,588	50,575
Emergency Medical Services	3,729	4,381	5,083	5,707	5,948	5,750	5,979	5,459	5,608	6,476	6,918	7,844	9,044	11,166	11,523
Public Health	16,980	22,023	26,367	30,140	33,704	35,470	38,149	34,092	36,818	38,125	41,998	46,973	47,243	47,785	52,418
Parks and Recreation	11,691	13,539	15,954	17,135	18,467	16,879	17,251	15,497	16,181	16,141	17,253	17,770	18,798	19,329	19,278
Austin Public Library	4,857	5,624	6,548	6,932	7,589	7,314	7,141	6,328	6,434	7,288	7,921	8,556	10,112	10,452	10,603
Public Works & Transportation	13,417	16,325	20,891	20,595	25,318	17,640	18,062	14,403	15,060	12,142	17,703	20,505	20,872	21,356	21,221
Urban Growth Management	1,903	2,111	3,471	0	490	701	856	10,597	8,022	7,907	8,104	9,435	11,014	11,050	10,728
Administrative Overhead & Special Funds	23,676	22,764	24,916	33,329	35,108	43,136	42,850	37,177	41,545	37,374	31,955	24,510	26,354	34,367	38,351
Debt Service	15,861	24,170	25,387	33,083	35,852	51,010	54,899	55,972	56,705	55,896	57,655	59,546	63,006	66,883	63,690
Capital Projects	24,524	36,086	24,427	40,395	30,247	90,798	74,762	70,214	48,571	22,671	28,381	40,601	59,537	59,462	43,594
Total Expenditures	**160,163**	**192,083**	**206,007**	**256,053**	**270,185**	**347,091**	**346,925**	**335,292**	**326,992**	**300,143**	**320,766**	**344,106**	**383,082**	**407,843**	**404,597**

	Fiscal Year Ended September 30 (in thousands)														
EXPENDITURES	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**
Municipal Court	6,589	6,675	7,863	9,217	9,422	9,255	8,831	8,231	8,772	9,391	10,195	11,507	11,998	11,727	12,239
Police	79,354	89,834	95,338	107,686	124,090	142,705	151,024	157,692	172,110	185,424	198,988	217,231	228,375	233,820	246,812
Fire	53,008	57,389	61,254	66,240	71,893	78,137	81,925	82,772	90,973	96,604	107,857	114,805	117,680	118,744	125,680
Emergency Medical Services	12,402	13,207	15,659	16,421	16,712	18,090	19,030	19,519	29,695	35,299	39,595	42,362	42,742	44,102	47,681
Public Safety & Emergency Mgmt	0	0	0	0	0	0	0	0	401	3,686	5,349	5,809	109	0	0
Public Health	51,281	45,741	49,880	51,852	48,931	53,632	55,819	25,568	26,632	29,671	32,085	34,942	36,850	37,636	40,113
Parks and Recreation	21,434	23,259	25,468	27,718	30,492	29,946	28,344	26,681	27,932	28,290	32,310	34,560	35,284	35,805	43,884
Austin Public Library	11,581	12,682	14,807	16,118	17,292	17,362	17,083	16,187	17,238	19,306	21,248	23,867	24,277	24,104	25,935
Public Works & Transportation	20,011	22,308	25,549	22,341	28,506	28,626	29,451	29,907	29,318	30,834	35,172	41,822	45,976	56,639	55,378
Urban Growth Management	7,622	8,167	8,973	10,216	15,095	11,114	11,590	10,032	15,177	16,529	18,798	20,632	19,316	17,514	33,675
Administrative Overhead & Special Funds	44,248	52,778	77,645	99,837	90,956	74,399	72,184	99,894	68,436	72,554	85,479	97,421	74,446	88,892	102,619
Debt Service	66,984	71,820	75,807	79,088	83,556	80,955	87,877	88,985	91,851	96,684	99,095	102,754	111,005	113,347	121,309
Capital Projects	62,701	57,874	79,971	99,864	105,424	174,239	155,517	151,768	81,507	87,931	94,228	119,290	96,342	166,491	160,682
Total Expenditures	**437,215**	**461,734**	**538,213**	**606,597**	**642,369**	**718,460**	**718,675**	**717,236**	**660,042**	**712,203**	**780,399**	**867,002**	**844,400**	**948,821**	**1,016,007**

Source: City of Austin Comprehensive Annual Financial Report (CAFR), 1982-2011

Appendix C: Property Tax Levies (1982-2011)

Property Tax Levies						
Fiscal Year Ended September 30	City of Austin	Austin I.S.D	Travis County	Central Health	Austin Community College	Total
1982	$45,327,395	$74,779,200	$23,900,974			$144,007,569
1983	$52,994,378	$85,636,326	$29,379,397			$168,010,101
1984	$64,691,580	$117,730,043	$35,125,301			$217,546,924
1985	$72,539,917	$117,705,837	$39,637,135			$229,882,889
1986	$89,256,120	$160,279,412	$52,683,808			$302,219,340
1987	$95,526,377	$169,738,196	$56,630,048			$321,894,621
1988	$113,193,932	$194,064,513	$74,296,499		$10,432,520	$391,987,464
1989	$101,588,091	$197,246,556	$87,076,637		$9,224,134	$395,135,418
1990	$102,229,873	$199,062,522	$88,310,400		$8,753,590	$398,356,385
1991	$97,895,866	$211,411,187	$89,173,677		$8,510,148	$406,990,878
1992	$102,013,000	$225,212,000	$108,443,000		$8,510,000	$444,178,000
1993	$108,825,000	$239,317,000	$121,694,000		$7,824,000	$477,660,000
1994	$113,529,000	$251,813,000	$135,027,000		$8,641,000	$509,010,000
1995	$117,892,000	$272,094,000	$143,659,000		$9,458,000	$543,103,000
1996	$126,908,000	$277,255,000	$149,801,000		$11,951,000	$565,915,000
1997	$135,599,000	$321,567,000	$157,852,000		$13,900,000	$628,918,000
1998	$148,490,000	$348,753,000	$168,089,000		$13,971,000	$679,303,000
1999	$166,901,000	$385,064,000	$196,160,000		$15,255,000	$763,380,000
2000	$179,225,000	$455,559,000	$209,688,000		$19,209,000	$863,681,000
2001	$193,138,000	$525,477,000	$231,415,000		$20,571,000	$970,601,000
2002	$219,658,000	$593,189,000	$256,710,000		$23,323,000	$1,092,880,000
2003	$233,342,000	$644,948,000	$287,478,000		$24,863,000	$1,190,631,000
2004	$241,296,000	$627,876,000	$293,345,000		$37,321,000	$1,199,838,000
2005	$220,184,000	$627,876,000	$293,753,000	$50,416,000	$44,345,000	$1,236,574,000
2006	$231,909,000	$636,792,000	$320,020,000	$60,798,000	$49,521,000	$1,299,040,000
2007	$249,674,000	$702,291,000	$339,590,000	$55,520,000	$70,836,000	$1,417,911,000
2008	$277,284,000	$732,434,000	$361,662,000	$59,543,000	$72,389,000	$1,503,312,000
2009	$307,929,000	$704,839,000	$391,696,000	$64,629,000	$79,189,000	$1,548,282,000
2010	$340,763,000	$735,582,000	$417,426,000	$66,842,000	$82,756,000	$1,643,369,000
2011	$354,798,000	$730,909,000	$441,859,000	$68,303,000	$79,524,000	$1,675,393,000

Source: City of Austin Comprehensive Annual Financial Report (CAFR), 1982-2011

References

Aidan R. Vining, and Anthony E. Boardman. "Public—Private Partnerships Eight Rules for Governments." *Public Works Management & Policy* 13, no. 2 (October 2008): 149–161. doi:10.1177/1087724X08323843.

Amir Hefetz, and Mildred Warner. "Privatization and Its Reverse: Explaining the Dynamics of the Government Contracting Process." *Journal of Public Administration Research and Theory* 14, no. 2 (April 2004): 171–190. doi:10.1093/jopart/muh012.

Amy K. Donahue, and Joanne M. Miller. "Citizen Preferences and Paying for Police." *Journal of Urban Affairs* 27, no. 4 (2005): 419–435. doi:10.1111/j.0735-2166.2005.00244.x.

Amy Smith. "The SOS Ordinance Turns 20," August 3, 2012. http://www.austinchronicle.com/news/2012-08-03/the-sos-ordinance-turns-20/.

Austin Independent School District. "School Funding." Accessed April 26, 2013. http://www.austinisd.org/legislature/school-funding.

Austin Parks & Recreation. "Marketing Plan FY 2011-2012," October 2012. http://www.austintexas.gov/sites/default/files/files/Parks/Media/marketingplan2012.pdf.

Benjamin Chinitz. "Growth Management Good for the Town, Bad for the Nation?" *Journal of the American Planning Association* 56, no. 1 (1990): 3–8. doi:10.1080/01944369008975739.

Beverly S. Bunch, and Robert P. Strauss. "Municipal Consolidation An Analysis of the Financial Benefits for Fiscally Distressed Small Municipalities." *Urban Affairs Review* 27, no. 4 (June 1992): 615–629. doi:10.1177/004208169202700407.

Brian Stipak. "Citizen Satisfaction with Urban Services: Potential Misuse as a Performance Indicator." *Public Administration Review* 39, no. 1 (January 1979): 46–52. doi:10.2307/3110378.

Burchell, Robert W., ed. *The Costs of Sprawl--Revisited*. Transit Cooperative Research Program (TCRP) Report 39. Transportation Research Board, 1998.

Capital Metro. "Capital Metro Ridership Soars in 2012," January 19, 2013. http://www.capmetro.org/news-item.aspx?id=1953.

Central Health. "About Us." Accessed April 1, 2013. http://www.traviscountyhd.org/about_us.html.

Charles M. Tiebout. "A Pure Theory of Local Expenditures." *Journal of Political Economy* 64, no. 5 (1956): 416–424. doi:10.2307/1826343.

City of Austin. "2002 Community Scorecard," October 2002.

———. "Imagine Austin Comprehensive Plan," June 2012. http://www.austintexas.gov/imagineaustin.

———. “Managing for Results Business Planning Guide,” Revised 2003. http://www.ci.austin.tx.us/budget/03-04/downloads/bpresourceguide2003.pdf.

City of Austin, Budget Office. “2012-2013 Proposed Budget Response to Request for Information,” August 2, 2012.

City of Austin, Financial and Administrative Services Department. “Austin Finance Online.” Accessed January 29, 2013. https://www.austintexas.gov/financeonline/finance/financial_docs.cfm?ws=1&pg=1.

———. “Budget in a Box.” Accessed April 23, 2013. http://austintexas.gov/online-form/budget-box.

City of Austin, Office of the City Clerk. “Election History.” Accessed April 20, 2013. http://www.ci.austin.tx.us/election/search.cfm.

City of Austin, Planning and Development Review Department. “City of Austin Population History: 1840-2013.” Accessed February 13, 2013. http://www.austintexas.gov/sites/default/files/files/Planning/Demographics/population_history_pub.pdf.

———. “Community Inventory: Demographic and Household Trends,” December 2009. ftp://ftp.ci.austin.tx.us/GIS-Data/planning/compplan/community_inventory_Demographcs_v1.pdf.

———. “Demographic Maps.” Accessed February 26, 2013. http://www.austintexas.gov/page/demographic-maps.

———. “Demographics.” Accessed January 29, 2013. http://www.austintexas.gov/demographics.

———. “Planning the Extraterritorial Jurisdiction.” Accessed February 13, 2013. http://www.austintexas.gov/department/planning-extraterritorial-jurisdiction.

City of Austin, Transportation, Planning, and Sustainability Department. “Austin Smart Growth Zones,” December 2003. http://www.utexas.edu/depts/grg/adams/374/smartgrowthmap.pdf.

Creative Consumer Research. “2007 City of Austin Citizen Survey,” 2007.

Dagney Faulk, and Georg Grassmueck. “City-county Consolidation and Local Government Expenditures.” *State and Local Government Review* 44, no. 3 (December 1, 2012): 196–205. doi:10.1177/0160323X12447955.

Daniel B. Edds. “Performance Management as a Sustainable Enterprise: The Washington State Transportation Improvement Board’s Example.” *Government Finance Review*, December 2011.

Daniel Bromberg. “Performance Measurement: A System with a Purpose or a Purposeless System?” *Public Performance & Management Review* 33, no. 2 (December 2009): 214–221.

David McKay and Eduardo Galvan. “Measuring Customer Service in the Municipality: Results of the 1998 Voice of the Customer and Employee Surveys.” Organization Research and Human Resources Department, September 1998.

David Osborne. *Reinventing Government: How the Entrepreneurial Spirit Is Transforming the Public Sector*. New York, N.Y., U.S.A: Plume, 1993.

Efraim Sadka. "Public-Private Partnerships—A Public Economics Perspective." *CESifo Economic Studies* 53, no. 3 (September 2007): 466–490. doi:10.1093/cesifo/ifm013.

Emanuel S. Savas. *Privatization: The Key to Better Government*. Chatham House Series on Change in American Politics. Chatham, N.J: Chatham House Publishers, 1987.

Envision Central Texas. "A Vision for Central Texas," May 2004. http://envisioncentraltexas.org/resources/ECT_visiondoc.pdf.

ETC Institute. "2011 City of Austin Community Survey," October 2011. https://assets.austintexas.gov/budget/11-12/downloads/austin_2011_survey_final_report.pdf.

Fred Bosse, et al. *SB 89*, 1999. http://www.legis.state.tx.us/billlookup/History.aspx?LegSess=76R&Bill=SB89.

Gaines H. Liner, and Rob Roy McGregor. "Optimal Annexation." *Applied Economics* 34, no. 12 (August 2002): 1477–1485.

Geoffrey Brennan, and James M. Buchanan. "Towards a Tax Constitution for Leviathan." *Journal of Public Economics* 8, no. 3 (December 1977): 255–273. doi:10.1016/0047-2727(77)90001-9.

George A. Boyne. "Local Government Structure and Performance: Lessons from America?" *Public Administration* 70, no. 3 (1992): 333–357.

———. *Public Choice Theory and Local Government: a Comparativeanalysis of the UK and the USA*. Houndmills, Basingstoke, Hampshire : New York: Macmillan Press ; St. Martin's Press, 1998.

Germà Bel, and Xavier Fageda. "Why Do Local Governments Privatise Public Services? A Survey of Empirical Studies." *Local Government Studies* 33, no. 4 (2007): 517–534. doi:10.1080/03003930701417528.

Germà Bel, Xavier Fageda, and Mildred E. Warner. "Is Private Production of Public Services Cheaper Than Public Production? A Meta-regression Analysis of Solid Waste and Water Services." *Journal of Policy Analysis and Management* 29, no. 3 (2010): 553–577. doi:10.1002/pam.20509.

Graeme A Hodge. "The Risky Business of Public–private Partnerships." *Australian Journal of Public Administration* 63, no. 4 (2004): 37–49. doi:10.1111/j.1467-8500.2004.00400.x.

Helen F Ladd. "Fiscal Impacts of Local Population Growth: A Conceptual and Empirical Analysis." *Regional Science and Urban Economics* 24, no. 6 (December 1994): 661–686. doi:10.1016/0166-0462(94)90006-X.

Helen F. Ladd. "Population Growth, Density and the Costs of Providing Public Services." *Urban Studies* 29, no. 2 (April 1992): 273–295. doi:10.1080/00420989220080321.

Helen F. Ladd, and John Yinger. *America's Ailing Cities: Fiscal Health and the Design Ofurban Policy*. Baltimore: Johns Hopkins University Press, 1989.

Jackie Chuter. "Austin Full and Limited Purpose City Limits: Annexations by Decade 1960-2009." Accessed February 13, 2013. http://www.austintexas.gov/sites/default/files/files/Planning/Annexation/Annexations_by_Decade.pdf.

Jacob Cottingham. "Austin May Join Effort to Buy Aquifer Property," August 1, 2008. http://www.austinchronicle.com/news/2008-08-01/654033/.

James E. Frank. *Costs of Alternative Development Patterns: A Review of the Literature*. Urban Land Institute, 1989.

Jeffrey M. Jones. "Americans Say Federal Gov't Wastes Over Half of Every Dollar," September 19, 2011. http://www.gallup.com/poll/149543/americans-say-federal-gov-wastes-half-every-dollar.aspx.

Jenny Staff. "S.o.s. 101," April 30, 1999. http://www.austinchronicle.com/news/1999-04-30/521885/.

Jesse Weiher. "A Brief Examination of Previous House Price Declines." Federal Housing Finance Agency, June 2009. http://www.fhfa.gov/webfiles/2918/previousdownturns61609.pdf.

Jie Gao. "Governing by Goals and Numbers: A Case Study in the Use of Performance Measurement to Build State Capacity in China." *Public Administration and Development* 29, no. 1 (2009): 21–31. doi:10.1002/pad.514.

Joel Warren Barna. "The Rise and Fall of Smart Growth in Austin." *Cite Magazine*, Spring 2002.

Katherine Gregor. "Austin Comp Planning: A Brief History." *The Austin Chronicle*, February 5, 2010. http://www.austinchronicle.com/news/2010-02-05/953471/.

Kayte Vanscoy. "Dotting I's, Circling C's." *The Austin Chronicle*, December 19, 1997. http://www.austinchronicle.com/news/1997-12-19/519285/.

Kenneth J. Mory. "Sworn Police Officer Staffing Levels of Peer Cities Compared to Austin." City of Austin: Office of the City Auditor, September 9, 2011. http://www.austintexas.gov/sites/default/files/files/Auditor/as11106.pdf.

Laura Heinauer, Marty Toohey, and Mary Ann Roser. "Local Entities Join Forces to Sync Myriad Bond, Tax Proposals." *The Austin American-Statesman*. Accessed April 26, 2013. http://www.statesman.com/news/news/local/local-entities-join-forces-to-sync-myriad-bond-t-1/nRp6H/.

Lawrence L. Martin, and Jeannie Hock Schiff. "City–County Consolidations Promise Versus Performance." *State and Local Government Review* 43, no. 2 (August 1, 2011): 167–177. doi:10.1177/0160323X11403938.

Laylan Copelin and Marty Toohey. "Legislation Seeks to Open up Austin Energy to Competition." *The Austin American-Statesman*, March 3, 2011. http://www.statesman.com/news/news/local/legislation-seeks-to-open-up-austin-energy-to-comp/nRX3H/.

M Ramesh, Eduardo Araral, and Wu Xun. *Reasserting the Public in Public Services New Public Management Reforms*. London; New York: Routledge, 2010. http://search.ebscohost.com/login.aspx?direct=true&scope=site&db=nlebk&db=nlabk&AN=311536.

Margaret J. Wheatly, and Myron Kellner-Rogers. "The Paradox and Promise of Community." In *The Community of the Future*, 45–54. edited by Frances Hesselbein, Marshall Goldsmith, Richard Beckhard, and Richard F. Schubert. Jossey-Bass, 2000.

Mark A. Glaser, Lee E. Parker, and Stephanie Payton. "The Paradox Between Community and Self-Interest: Local Government, Neighborhoods, and Media." *Journal of Urban Affairs* 23, no. 1 (2001): 87–102. doi:10.1111/0735-2166.00077.

Mark A. Glaser, Maria P. Aristigueta, and Stephanie Payton. "Harnessing the Resources of Community: The Ultimate Performance Agenda." *Public Productivity & Management Review* 23, no. 4 (2000): 428–448. doi:10.2307/3380562.

Mary M. Edwards, and Yu Xiao. "Annexation, Local Government Spending, and the Complicating Role of Density." *Urban Affairs Review* 45, no. 2 (November 2009): 147–165. doi:10.1177/1078087409341036.

Michael E Barrett, and Randall J Charbeneau. "A Parsimonious Model for Simulating Flow in a Karst Aquifer." *Journal of Hydrology* 196, no. 1–4 (September 1, 1997): 47–65. doi:10.1016/S0022-1694(96)03339-2.

Mike Erwin. "Managing for Results Austin Texas." ICMA Best Practices 2004, April 2004. http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0CDEQFjAA&url=http%3A%2F%2Ficma.org%2FDocuments%2FDocument%2FDocument%2F7201&ei=pbV6UeT7KOmQ2gWV2oC4Ag&usg=AFQjCNHOektnHgdv-jlrAT8Ew8Q2T5bwLA&bvm=bv.45645796,d.b2I&cad=rja.

Mildred E. Warner. "Privatization and Urban Governance: The Continuing Challenges of Efficiency, Voice and Integration." *Cities* 29 (December 2012): S38–S43. doi:10.1016/j.cities.2012.06.007.

———. "The Future of Local Government: Twenty-First-Century Challenges." *Public Administration Review* 70 (2010): s145–s147. doi:10.1111/j.1540-6210.2010.02257.x.

Minnesota Taxpayers Association. "50-State Property Tax Comparison Study: Payable 2011," March 2012. http://www.fiscalexcellence.org/policy/property-taxes/example-article-2.html.

Miriam Hortas-Rico, and Albert Solé-Ollé. "Does Urban Sprawl Increase the Costs of Providing Local Public Services? Evidence from Spanish Municipalities." *Urban Studies* 47, no. 7 (June 1, 2010): 1513–1540. doi:10.1177/0042098009353620.

Patricia Fraga. "City Receives National Recognition for Financial Transparency." *City of Austin, Communications and Public Information Office*, July 31, 2012.

http://austintexas.gov/news/city-receives-national-recognition-financial-transparency.

Police Executive Research Forum. "Austin Police Department Patrol Utilization Study," July 2012. http://www.austintexas.gov/sites/default/files/files/Police/PERF_Final_Report_-_Austin.pdf.

Randall G. Holcombe, and DeEdgra W. Williams. "The Impact of Population Density on Municipal Government Expenditures." *Public Finance Review* 36, no. 3 (May 2008): 359–373. doi:10.1177/1091142107308302.

Real Estate Research Corporation. *The Costs of Sprawl: Environmental and Economic Costs of Alternative Residential Development Patterns at the Urban Fringe*. U.S. Environmental Protection Agency, 1974.

Richard C. Box. "Running Government Like a Business Implications for Public Administration Theory and Practice." *The American Review of Public Administration* 29, no. 1 (March 1999): 19–43. doi:10.1177/02750749922064256.

Richard C. Feiock. "Do Consolidation Entrepreneurs Make a Deal with the Devil?" In *City-county Consolidation and Its Alternatives: Reshaping the Local Government Landscape*, 39–52. edited by Jered B. Carr and Richard C. Feiock. Reshaping the Local Government Landscape. Armonk, N.Y: M.E. Sharpe, 2004.

Richard R. Geddes. *The Road to Renewal: Private Investment in the U.S. Transportation Infrastructure*. AEI Press, 2011.

Robert D. Behn. *Rethinking Democratic Accountability*. Brookings Institution Press, 2001.

Robert Puentes, and Adie Tomar. "The Road…Less Traveled: An Analysis of Vehicle Miles Traveled Trends in the U.S." The Brookings Institution, December 2008. http://www.brookings.edu/research/reports/2008/12/16-transportation-tomer-puentes.

Ryan Robinson. "Austin Area Population Histories and Forecasts." City of Austin, Planning and Development Review Department, January 2013. http://www.austintexas.gov/sites/default/files/files/Planning/Demographics/austin_forecast_2013_annual_pub.pdf.

"Save Our Springs Ordinance Now 20 Years Old." Accessed February 25, 2013. http://www.statesman.com/news/news/local/save-our-springs-ordinance-now-20-years-old/nRNJP/.

Scott Houston. *Municipal Annexation in Texas: Is It Really That Complicated?* Texas Municipal League, 2003. http://www.tml.org/legal_pdf/ANNEXATION.pdf.

Shirley S. Angrist. "Subjective Social Indicators for Urban Areas: How Useful for Policy?" *Sociological Focus* 9, no. 3 (August 1976): 217–230. doi:10.2307/20831001.

Simonsen, Bill, and Mark D. Robbins. “Reasonableness, Satisfaction, and Willingness to Pay Property Taxes.” *Urban Affairs Review* 38, no. 6 (July 1, 2003): 831–854. doi:10.1177/1078087403038006004.

Srimai, Suwit, Jack Radford, and Chris Wright. “Evolutionary Paths of Performance Measurement: An Overview of Its Recent Development.” *International Journal of Productivity and Performance Management* 60, no. 7 (2011): 662–687. doi:10.1108/17410401111167771.

Texas Education Agency. “Chapter 41 Wealth Equalization,” April 2013. http://www.tea.state.tx.us/index2.aspx?id=6796.

Texas Transportation Institute. “2012 Urban Mobility Report,” December 2012. http://mobility.tamu.edu/ums/report/.

The Greater Austin Chamber of Commerce. “Cost of Living.” Accessed February 13, 2013. http://www.austinchamber.com/do-business/data-research/area-profile/cost-of-living.php.

Timothy J. Murphy. “The Case for Public-private Partnerships in Infrastructure.” *Canadian Public Administration* 51, no. 1 (2008): 99–126. doi:10.1111/j.1754-7121.2008.00006.x.

U. S. Census Bureau. “1-Year Estimates, Selected Economic Characteristics.” Accessed February 13, 2013. http://factfinder2.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t.

U.S. Bureau of Economic Analysis. “Table 3.9.4. Price Indexes for Government Consumption Expenditures and Gross Investment.” *National Income and Product Account (NIPA) Tables*. Accessed January 29, 2013. http://www.bea.gov/iTable/iTable.cfm?reqid=9&step=3&isuri=1&910=x&911=0&903=97&904=1982&905=2012&906=a#reqid=9&step=3&isuri=1&910=x&911=0&903=97&904=1982&905=2012&906=a.

U.S. Bureau of Labor Statistics. “Consumer Price Index - All Urban Consumers (Dallas-Fort Worth, TX).” *Databases, Tables & Calculators by Subject*. Accessed April 7, 2013. http://www.bls.gov/data/#prices.

William L. C. Wheaton, and Morton J. Schussheim. “The Cost of Municipal Services in Residential Areas.” U.S. Department of Commerce, 1955. http://hdl.handle.net/2027/uiug.30112000534377.

William Scott Swearingen. *Environmental City: People, Place, Politics, and the Meaning of Modern Austin*. University of Texas Press, 2010.

Vita

Benjamin Daniel Ellinor was born in Austin, Texas. He received a Bachelor of Arts in Economics from Davidson College in 2008 and after graduating, served a 10-month term in the AmeriCorps program working for Habitat for Humanity. In 2012, he was awarded the Blodgett Fellowship in Urban Management at the Lyndon B. Johnson School of Public Affairs, the University of Texas at Austin. He is currently employed at the City of Austin Budget Office.

Permanent email address: beellinor@gmail.com

This report was typed by the author.